Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 16 SEP 2005 HIGHEST RN 863378-74-9
DICTIONARY FILE UPDATES: 16 SEP 2005 HIGHEST RN 863378-74-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

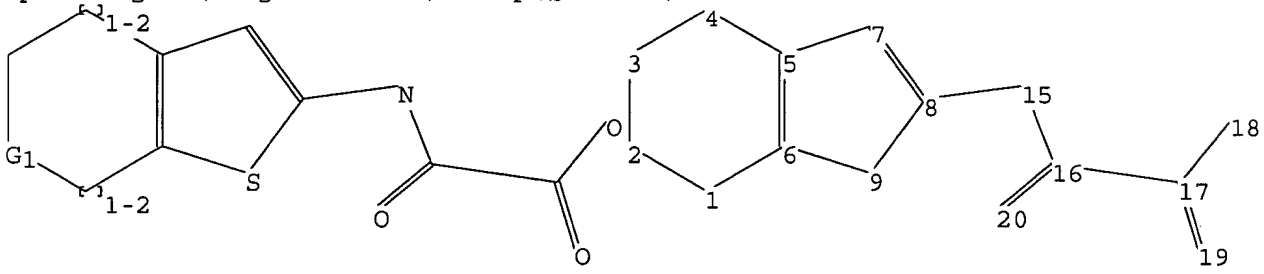
Please note that search-term pricing does apply when conducting SmartSELECT searches.

****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Program Files\Stnexp\Queries\09662457.str



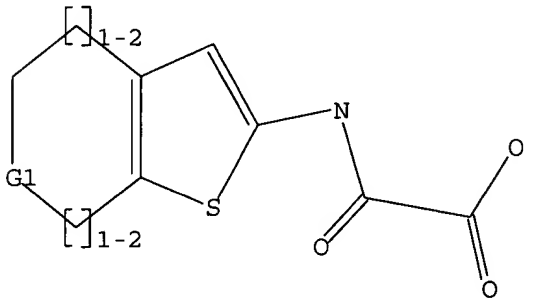
chain nodes :
15 16 17 18 19 20
ring nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
8-15 15-16 16-17 16-20 17-18 17-19
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 8-15 15-16 16-17 16-20 17-18 17-19

G1:O,S

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 15:CLASS
16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



G1 O,S

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SEARCH INITIATED 00:45:50 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 334 TO ITERATE

100.0% PROCESSED 334 ITERATIONS 13 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 5584 TO 7776
PROJECTED ANSWERS: 44 TO 476

L2 13 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 00:45:58 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 6383 TO ITERATE

100.0% PROCESSED 6383 ITERATIONS 276 ANSWERS
SEARCH TIME: 00.00.01

L3 276 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 161.33 161.54

FILE 'CAPLUS' ENTERED AT 00:46:04 ON 19 SEP 2005

FILE COVERS 1907 - 19 Sep 2005 VOL 143 ISS 13
FILE LAST UPDATED: 18 Sep 2005 (20050918/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L4 12 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:238994 CAPLUS
DOCUMENT NUMBER: 142:316820
TITLE: Preparation of hetero-bicyclic fused thieno-pyran compounds as antibacterial, antiviral, antitumor, and pharmaceutically active agents
INVENTOR(S): Koul, Anil; Klebl, Bert; Mueller, Gerhard; Missio, Andrea; Schwab, Wilfried; Hafenbradl, Doris; Neumann, Lars; Sommer, Marc-Nicola; Mueller, Stefan; Hoppe, Edmund; Freisleben, Achim; Backes, Alexander; Hartung, Christian; Felber, Beatrice; Zech, Birgit; Engkvist, Ola; Keri, Gyoergy; Oerfi, Laszlo; Banhegyi, Peter; Greff, Zoltan; Horvath, Zoltan; Varga, Zoltan; Marko, Peter; Pato, Janos; Szabadkai, Istvan; Szekelyhidi, Zsolt; Waczek, Frigyes
PATENT ASSIGNEE(S): Axxima Pharmaceuticals A.-G., Germany
SOURCE: PCT Int. Appl., 259 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

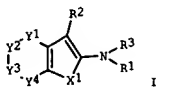
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005023818	A2	20050317	WO 2004-EP10161	20040910
WO 2005023818	A3	20050825		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

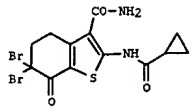
PRIORITY APPLN. INFO.:		
EP 2003-20616	A	20030910
US 2003-502606P	P	20030915
EP 2004-4891	A	20040302
US 2004-551341P	P	20040310
EP 2004-12814	A	20040528
US 2004-577043P	P	20040607

OTHER SOURCE(S): MARPAT 142:316820
GI

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



I

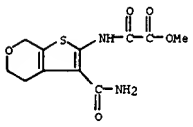


II

AB Described are hetero-bicyclic compds. such as 4,5,6,7-tetrahydro-benzo[b]thiophene-3-carboxylic acid amides, 4,7-dihydro-5H-thieno[2,3-c]thiopyran-3-carboxylic acid amides, 4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid amides, or benzo[b]thiophene-3-carboxylic acid amides I, wherein X1 is S, O, NH, substituted nitrogen; Y1-Y4 form with the ring containing X1 a hetero-bicyclic ring system; R1 is H, alkyl, cycloalkyl, heterocycle, alkynyl, substituted Ph, acyl, benzyl; R2 is amide, thioamide, sulfonamide, ester, sulfonyl; R3 is H, acyl, thio-ketone, sulfonyl, amide, thio-amide, diketone-amide, ester, thio-ester; and pharmaceutically acceptable salts thereof, the use of these derivs. for the prophylaxis and/or treatment of various diseases such as infectious diseases, including mycobacteria-induced infections and opportunistic diseases, prion diseases, immunol. diseases, autoimmune diseases, bipolar and clin. disorders, cardiovascular diseases, cell proliferative diseases, diabetes, inflammation, transplant rejections, erectile dysfunction, neurodegenerative diseases and stroke, as well as compns. containing at least one hetero-bicyclic compound and/or pharmaceutically acceptable salts thereof. Furthermore, reaction procedures for the synthesis of the hetero-bicyclic compound are disclosed. Thus, benzo[b]thiophen-carboxylic acid amide II was prepared and tested in vitro for its inhibitory effect on mycobacterial protein kinase G (IC50 = 0.1-1.0 μM).

IT **848326-53-4P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of heterobicyclic fused thienopyran compds. as antibacterial antiviral antitumor and pharmaceutically active agents)

RN 848326-53-4 CAPLUS
CN Acetic acid, [[3-(aminocarbonyl)-4,7-dihydro-5H-thieno[2,3-c]pyran-2-yl]amino]oxo-, methyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

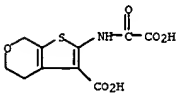
L4 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:907753 CAPLUS
DOCUMENT NUMBER: 140:314391
TITLE: Structure-based prediction of free energy changes of binding of PTP1B inhibitors
AUTHOR(S): Wang, Jing; Ling Chan, Shek; Ramnarayan, Kal
CORPORATE SOURCE: Structural Bioinformatics Inc., San Diego, CA, 92127, USA
SOURCE: Journal of Computer-Aided Molecular Design (2003), 17(8), 495-513
CODEN: JCADEQ; ISSN: 0920-654X
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The goals were (1) to understand the driving forces in the binding of small mol. inhibitors to the active site of PTP1B and (2) to develop a mol. mechanics-based empirical free energy function for compound potency prediction. A set of compds. with known activities was docked onto the active site. The related energy components and mol. surface areas were calculated The bridging water mols. were identified and their contributions were considered. Linear relationships were explored between the above terms and the binding free energies of compds. derived based on exptl. inhibition consts. We found that minimally three terms are required to give rise to a good correlation (0.86) with predictive power in five-group cross-validation test (q2 = 0.70). The dominant terms are the electrostatic energy and non-electrostatic energy stemming from the intra- and intermol. interactions of solutes and from those of bridging water mols. in complexes.

IT **243967-41-1**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)
(structure-based prediction of free energy changes of binding of PTP1B inhibitors)

RN 243967-41-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

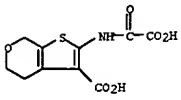
L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:655854 CAPLUS
DOCUMENT NUMBER: 140:37911
TITLE: A novel strategy for the development of selective active-site inhibitors of the protein tyrosine phosphatase-like proteins islet-cell antigen 512 (IA-2) and phogrin (IA-2β)
AUTHOR(S): Drake, Paul G.; Peters, Guenther H.; Andersen, Henrik Sune; Hendriks, Wiljan; Moller, Niels Peter H.
CORPORATE SOURCE: Signal Transduction, Novo Nordisk, Bagsvaerd, DK-2880, Den.
SOURCE: Biochemical Journal (2003), 373(2), 393-401
CODEN: BIJOAK; ISSN: 0264-6021
PUBLISHER: Portland Press Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Islet-cell antigen 512 (IA-2) and phogrin (IA-2β) are atypical members of the receptor protein tyrosine phosphatase (PTP) family that are characterized by a lack of activity against conventional PTP substrates. The physiol. role(s) of these proteins remain poorly defined, although recent studies indicate that IA-2 may be involved in granule trafficking and exocytosis. To further understand their function, we have embarked upon developing low-mol.-mass inhibitors of IA-2 and IA-2β. Previously, we have shown that a general PTP inhibitor, 2-(oxalylamino)benzoic acid (OBA), can be developed into highly selective and potent inhibitors of PTP1B. However, since wild-type IA-2 and IA-2β lack conventional PTP activity, a novel strategy was designed whereby catalytically active species were generated by "back-mutating" key non-consensus catalytic region residues to those of PTP1B. These mutants were then used as tools with which to test the potency and selectivity of OBA and a variety of its derivs. Catalytically competent IA-2 and IA-2β species were generated by "back-mutation" of only three key residues (equivalent to Tyr46, Asp181 and Ala217 using the human PTP1B numbering) to those of PTP1B. Importantly, enzyme kinetic analyses indicated that the overall fold of both mutant and wild-type IA-2 and IA-2β was similar to that of classic PTPs. In particular, one derivative of OBA, namely 7-(1,1-dioxo-1H-benzo[d]isothiazol- 3-yloxy-methyl)-2-(oxalylamino)-4,7- dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid ("Compound 6" shown in the main paper), which inhibited IA-2β(S762Y/Y898P/D933A) (IA-2β in which Ser762 has been mutated to tyrosine, Tyr898 to proline, and Asp933 to alanine) with a Ki value of ≈ 8 μM, appeared ideal for future lead optimization. Thus mol. modeling of this classical, competitive inhibitor in the catalytic site of wild-type IA-2β identified two residues (Ser762 and Asp933) that offer the possibility for unique interaction with an appropriately modified "Compound 6". Such a compound has the potential to be a highly selective and potent active-site inhibitor of wild-type IA-2β.

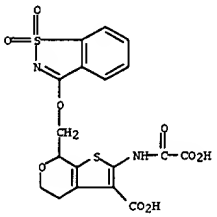
IT **243967-41-1 330653-71-9**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(development of selective active-site inhibitors of protein tyrosine phosphatase-like proteins islet-cell, antigen 512 (IA-2) and phogrin (IA-2β))

RN 243967-41-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330653-71-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[(1,1-dioxido-1,2-benzisothiazol-3-yl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

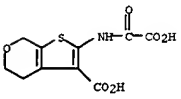
L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:283456 CAPLUS
DOCUMENT NUMBER: 139:145689
TITLE: Ligand-induced conformational changes: Improved predictions of ligand binding conformations and affinities
AUTHOR(S): Frimurer, Thomas M.; Peters, Gunther H.; Iversen, Lars F.; Andersen, Henrik S.; Moller, Niels Peter H.; Olsen, Ole H.
CORPORATE SOURCE: 7TM Pharma, Copenhagen, DK-2100, Den.
SOURCE: Biophysical Journal (2003), 84(4), 2273-2281
CODEN: BIOJAU; ISSN: 0006-3495
PUBLISHER: Biophysical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A computational docking strategy using multiple conformations of the target protein is discussed and evaluated. A series of low mol. weight, competitive, nonpeptide protein tyrosine phosphatase inhibitors are considered for which the x-ray crystallog. structures in complex with protein tyrosine phosphatase 1B (PTP1B) are known. To obtain a quant. measure of the impact of conformational changes induced by the inhibitors, these were docked to the active site region of various structures of PTP1B using the docking program FlexX. Firstly, the inhibitors were docked to a PTP1B crystal structure cocrystd. with a hexapeptide. The estimated binding energies for various docking modes as well as the RMS differences between the docked compds. and the crystallog. structure were calculated In this scenario the estimated binding energies were not predictive inasmuch as docking modes with low estimated binding energies corresponded to relatively large RMS differences when aligned with the corresponding crystal structure. Secondly, the inhibitors were docked to their parent protein structures in which they were cocrystd. In this case, there was a good correlation between low predicted binding energy and a correct docking mode. Thirdly, to improve the predictability of the docking procedure in the general case, where only a single target protein structure is known, we evaluate an approach which takes possible protein side-chain conformational changes into account. Here, side chains exposed to the active site were considered in their allowed rotamer conformations and protein models containing all possible combinations of side-chain rotamers were generated. To evaluate which of these modeled active sites is the most likely binding site conformation for a certain inhibitor, the inhibitors were docked against all active site models. The receptor rotamer model corresponding to the lowest estimated binding energy is taken as the top candidate. Using this protocol, correct inhibitor binding modes could successfully be discriminated from proposed incorrect binding modes. Moreover, the ranking of the estimated ligand binding energies was in good agreement with exptl. observed binding affinities.

IT **243967-41-1**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(modeling of protein tyrosine phosphatase 1B (PTP1B)-inhibitor interactions)

RN 243967-41-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

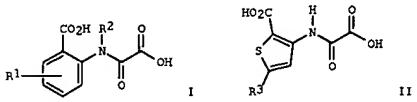
L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

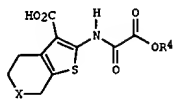
L4 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:640950 CAPLUS
DOCUMENT NUMBER: 137:369997
TITLE: Discovery and SAR of a Novel Selective and Orally Bioavailable Nonpeptide Classical Competitive Inhibitor Class of Protein-Tyrosine Phosphatase 1B
AUTHOR(S): Andersen, Henrik Sune; Olsen, Ole H.; Iversen, Lars F.; Sorensen, Anette L. P.; Mortensen, Steen B.; Christensen, Michael S.; Branner, Sven; Hansen, Thomas K.; Lau, Jesper F.; Jeppesen, Lone; Moran, Edmond J.; Su, Jing; Bakir, Farid; Judge, Luke; Shahbaz, Manou; Collins, Tassie; Vo, Todd; Newman, Michael J.; Ripka, William C.; Moller, Niels Peter H.
CORPORATE SOURCE: Departments of Medicinal Chemistry Research 1, 4, and 5 and Drug Metabolism, Health Care Discovery, Novo Nordisk A/S, Malov, DK-2760, Den.
SOURCE: Journal of Medicinal Chemistry (2002), 45(20), 4443-4459
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:369997
GI



I

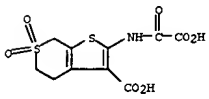
II



III

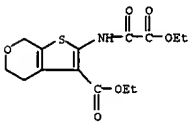
AB A broad approach to the synthesis of low-mol.-weight active site-directed selective inhibitors of specific members of protein-tyrosine phosphatase (PTPs) family was developed. 2-(Oxalylamino)benzoic acid I (R1 = R2 = H), previously identified as a relatively weak but classical competitive inhibitor of several PTPs by a high throughput screening, was used as a starting point for the synthesis of selective PTP inhibitors I (R1 = H, 3-Me, 4-iodo, 4-Ph, etc.; R2 = H, Me), II [R3 = H, Ph, 3-thienyl, 4-HOC6H4, 3,5-(MeO)2C6H3, etc.], and III [R4 = H; X = CH2, CO, CHOH, O, S, SO2, NR5; R5 = H, Me, PhCH2, 2-(3-thienyl)ethyl, etc.]. Good oral bioavailability in rat was observed for III [R4 = H; X = O, NH, Ph(CH2)2N]. Furthermore, enhancement of 2-deoxyglucose accumulation in C2C12 cells was

L4 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

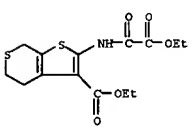


IT **474843-62-4P 474843-63-5P 474843-64-6P**
474843-65-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of (oxalylamino)benzoic acids and (carboxyheteroarylamino)oxali
c acids as selective and orally bioavailable nonpeptide inhibitors of protein-tyrosine phosphatase 1B)

RN 474843-62-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(ethoxyoxoacetyl)amino]-4,7-dihydro-, ethyl ester (9CI) (CA INDEX NAME)



RN 474843-63-5 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(ethoxyoxoacetyl)amino]-4,7-dihydro-, ethyl ester (9CI) (CA INDEX NAME)

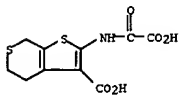


RN 474843-64-6 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(ethoxyoxoacetyl)amino]-4,7-dihydro-, ethyl ester, 6-oxide (9CI) (CA INDEX NAME)

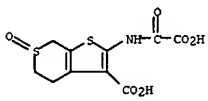
L4 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
obsd. with some prodrug analogs, e.g. III [R4 = Et, X = Ph(CH2)2N].

IT **243966-19-0P 243966-33-8P 243967-41-1P**
243967-48-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of (oxalylamino)benzoic acids and (carboxyheteroarylamino)oxali
c acids as selective and orally bioavailable nonpeptide inhibitors of protein-tyrosine phosphatase 1B)

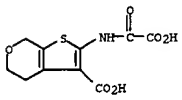
RN 243966-19-0 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-33-8 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, 6-oxide (9CI) (CA INDEX NAME)

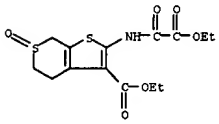


RN 243967-41-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

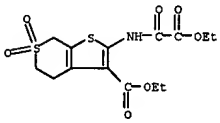


RN 243967-48-8 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, 6,6-dioxide (9CI) (CA INDEX NAME)

L4 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 474843-65-7 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(ethoxyoxoacetyl)amino]-4,7-dihydro-, ethyl ester, 6,6-dioxide (9CI) (CA INDEX NAME)



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

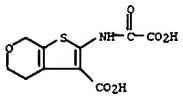
ACCESSION NUMBER: 2001:828237 CAPLUS
DOCUMENT NUMBER: 136:98294
TITLE: Steric Hindrance as a Basis for Structure-Based Design of Selective Inhibitors of Protein-Tyrosine Phosphatases
AUTHOR(S): Iversen, Lars Fogh; Andersen, Henrik Sune; Moller, Karin Bach; Olsen, Ole Hvilsted; Peters, Guenther H.; Branner, Sven; Mortensen, Steen B.; Hansen, Thomas Kruse; Lau, Jesper; Ge, Yu; Holsworth, Daniel D.; Newman, Michael J.; Moller, Niels Peter Hundahl
CORPORATE SOURCE: Protein Chemistry and Signal Transduction, Novo Nordisk, Bagsvaerd, DK-2880, Den.
SOURCE: Biochemistry (2001), 40(49), 14812-14820
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:98294

AB Utilizing structure-based design, we have previously demonstrated that it is possible to obtain selective inhibitors of protein-tyrosine phosphatase 1B (PTP1B). A basic nitrogen was introduced into a general PTP inhibitor to form a salt bridge to Asp48 in PTP1B and simultaneously cause repulsion in PTPs containing an asparagine in the equivalent position [Iversen, L. F., et al. (2000) J. Biol. Chemical 275, 10300-10307]. Further, we have recently demonstrated that Gly259 in PTP1B forms the bottom of a gateway that allows easy access to the active site for a broad range of substrates, while bulky residues in the same position in other PTPs cause steric hindrance and reduced substrate recognition capacity [Peters, G. H., et al. (2000) J. Biol. Chemical 275, 18201-18209]. The current study was undertaken to investigate the feasibility of structure-based design, utilizing these differences in accessibility to the active site among various PTPs. We show that a general, low-mol. weight PTP inhibitor can be developed into a highly selective inhibitor for PTP1B and TC-PTP by introducing a substituent, which is designed to address the region around residues 258 and 259. Detailed enzyme kinetic anal. with a set of wild-type and mutant PTPs, X-ray protein crystallog., and mol. modeling studies confirmed that selectivity for PTP1B and TC-PTP was achieved due to steric hindrance imposed by bulky position 259 residues in other PTPs.

IT **243967-41-1**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(active site steric hindrance can be used as basis for structure-based design of selective inhibitors of protein-tyrosine phosphatases)

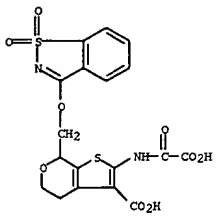
RN 243967-41-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT **330653-71-9P**
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(active site steric hindrance can be used as basis for structure-based design of selective inhibitors of protein-tyrosine phosphatases)

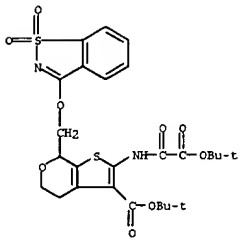
RN 330653-71-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[(1,1-dioxido-1,2-benzisothiazol-3-yl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



IT **389120-79-0P**
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(active site steric hindrance can be used as basis for structure-based design of selective inhibitors of protein-tyrosine phosphatases)

RN 389120-79-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-7-[[(1,1-dioxido-1,2-benzisothiazol-3-yl)oxy]methyl]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



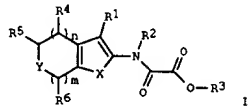
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:208280 CAPLUS
DOCUMENT NUMBER: 134:252328
TITLE: Preparation of 2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acids as protein tyrosine phosphatase inhibitors
INVENTOR(S): Andersen, Henrik Sune; Hansen, Thomas Kruse; Lau, Jesper; Moller, Niels Peter Hundahl; Olsen, Ole Hvilsted; Axe, Frank Urban; Ge, Yu; Holsworth, Daniel Dale; Jones, Todd Kevin; Judge, Luke Milburn; Ripka, William Charles; Shapira, Barry Zvi; Uyeda, Roy Teruyuki
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.; Ontogen Corporation
SOURCE: PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001019831	A1	20010322	WO 2000-DK503	20000911
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1214325	A1	20020619	EP 2000-958277	20000911
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003509430	T2	20030311	JP 2001-523408	20000911
PRIORITY APPLN. INFO.:			DK 1999-1278	A 19990910
			WO 2000-DK503	W 20000911

OTHER SOURCE(S): MARPAT 134:252328
GI



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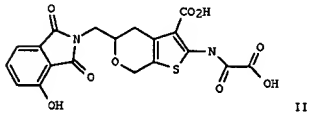


II

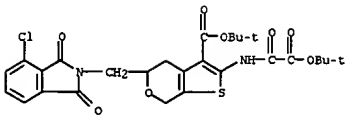
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

AB The title compds. (I) [wherein n = 0-2; m = 1 or 2; X = S or O; Y = O, S, SO, or SO2; R1 = H or CO2R3, tetrazolyl, 3-hydroxyoxazolyl, 3-hydroxyisothiazolyl, 3-hydroxypyrazolyl, 3-hydroxy-1,2,4-oxadiazolyl, 2-thio-1,3,4-oxadiazolyl, 2-hydroxyoxazolyl, 2-hydroxythiazolyl, etc.; R2 = H, alkyl, OH, or NR7R8; R3 = H (ar)alkyl, or alkylcarbonyloxy(ar)alkyl; R4-R6 = independently H, trihalomethyl, (ar)alkyl, (hetero)aryl, OH, oxo, carboxy(alkyl), alkyloxycarbonyl, alkoxy(alkyl), (ar)alkyloxyalkyl, thio, alkylthio, (un)substituted amino, acyl, alkylcarbonylamino(alkyl), etc.; R7 and R8 = independently H, (ar)alkyl, aryl, (ar)alkylcabonyl, arylcarbonyl, or (ar)alkylcarboxy; or R7 and R8 together with the N to which they are attached form an (un)substituted mono-, bi-, or tricyclic ring system containing 0-3 heteroatoms; or R7 and R8 = independently a 5-7 membered amine, imide, or lactam] were prepared as inhibitors of protein tyrosine phosphatases (PTPases), such as PTP1B, CD45, SHP-1, SHP-2, PTPα, LAR, and HePTP. For example, 5-(4-benzyloxy-1,3-dioxo-1,3-dihydroisoindol-2-ylmethyl)-2-(tert-butoxyoxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid tert Bu ester was debenzylated using Pd/C in EtOAc (67%) and deesterified using 25% TFA in CH2Cl2 to afford II (72%). In a study evaluating for biol. activity against a truncated form of PTP1B, II inhibited PTP1B with a Ki of 1.5 μM. I are useful in the treatment of type I diabetes, type II diabetes, impaired glucose tolerance, insulin resistance, obesity, and other diseases (no data).

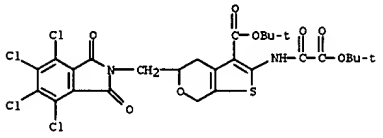
IT **330192-16-0P 330192-18-2P 330192-20-6P**
330192-22-8P 330192-24-0P 330192-25-1P
330192-27-3P 330192-30-8P 330192-31-9P
330192-32-0P 330192-33-1P 330192-36-4P
330192-38-6P 330192-39-7P 330192-41-1P
330192-43-3P 330192-46-6P 330192-50-2P
330192-52-4P 330192-53-5P 330192-55-7P
330192-56-8P 330192-59-1P 330192-61-5P
330192-63-7P 330192-68-2P 330192-71-7P
330192-72-8P 330192-76-2P 330192-78-4P
330192-81-9P 330192-82-0P 330192-84-2P
330192-90-0P 330192-91-1P 330192-93-3P
330193-42-5P 330193-46-9P 330193-47-0P
330193-52-7P 330193-55-0P 330193-57-2P
330193-58-3P 330653-63-9P 330653-65-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of 2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acids as PTP1B inhibitors for treatment of diabetes, impaired glucose tolerance, insulin resistance, obesity, and other diseases)

RN 330192-16-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(4-chloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

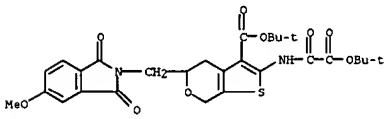
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-18-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[(4,5,6,7-tetrachloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

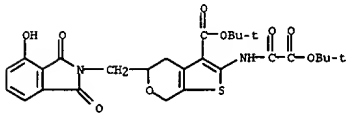


RN 330192-20-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-5-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

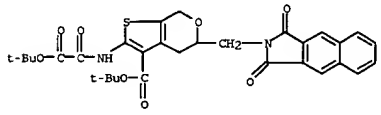


RN 330192-22-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-4-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

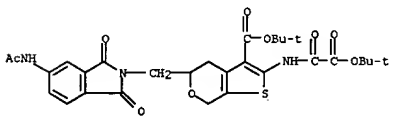
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



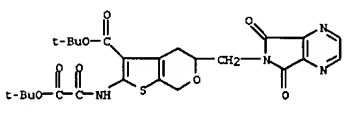
RN 330192-24-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-1,3-dioxo-2H-benz[f]isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 330192-25-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[5-(acetylamino)-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



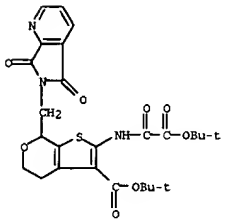
RN 330192-27-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyrazin-6-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



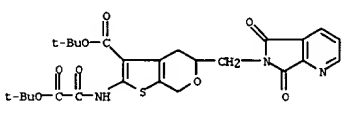
RN 330192-30-8 CAPLUS

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

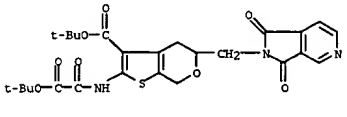
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 330192-31-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

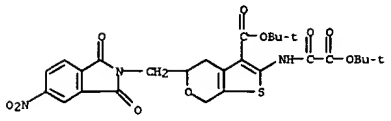


RN 330192-32-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-1,3-dioxo-2H-pyrrolo[3,4-c]pyridin-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

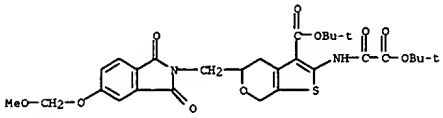


RN 330192-33-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-5-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

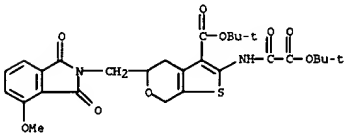
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-36-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[1,3-dihydro-5-(methoxymethoxy)-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

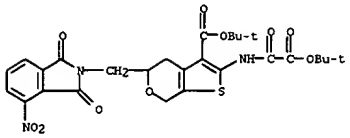


RN 330192-38-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-4-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

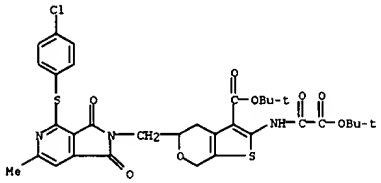


RN 330192-39-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-4-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

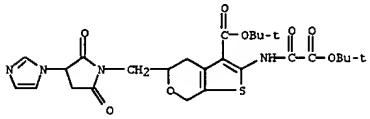
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-41-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[4-[(4-chlorophenyl)thio]-1,3-dihydro-6-methyl-1,3-dioxo-2H-pyrrolo[3,4-c]pyridin-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

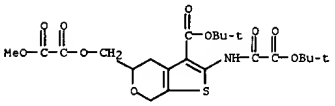


RN 330192-43-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[[3-(1H-imidazol-1-yl)-2,5-dioxo-1-pyrrolidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

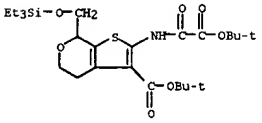


RN 330192-46-6 CAPLUS
CN Ethanedioic acid, [3-[(1,1-dimethylethoxy)carbonyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-

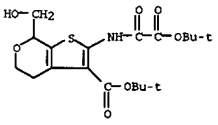
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
yl]methyl methyl ester (9CI) (CA INDEX NAME)



RN 330192-50-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-7-[[(triethylsilyl)oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

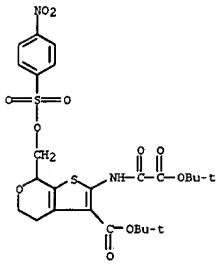


RN 330192-52-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-7-(hydroxymethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

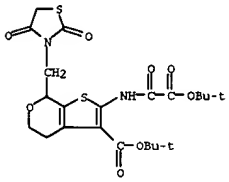


RN 330192-53-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-7-[[[(4-nitrophenyl)sulfonyl]oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

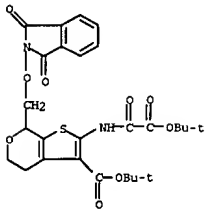


RN 330192-55-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-7-[(2,4-dioxo-3-thiazolidinyl)methyl]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

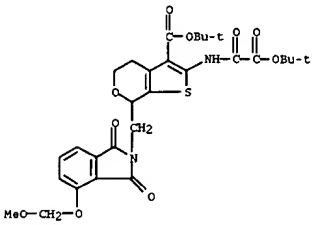


RN 330192-56-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)oxy]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

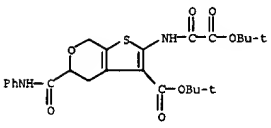


RN 330192-59-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[(1,3-dihydro-4-(methoxymethoxy)-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

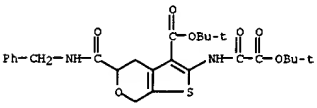


RN 330192-61-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[(1,3-benzodioxol-5-ylcarbonyl]amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

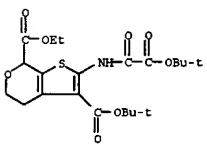
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-71-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[[(phenylmethyl)amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

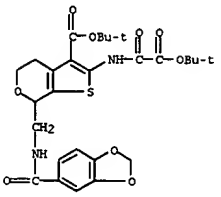


RN 330192-72-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3,7-dicarboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 3-(1,1-dimethylethyl) 7-ethyl ester (9CI) (CA INDEX NAME)

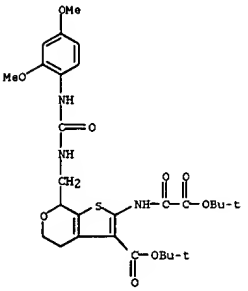


RN 330192-76-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-7-[[(phenylmethyl)amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

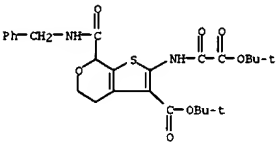


RN 330192-63-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[[(2,4-dimethoxyphenyl)amino]carbonyl]amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 330192-68-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[(phenylamino)carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-78-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-7-[[[[4-(methylsulfonyl)phenyl]acetyl]amino]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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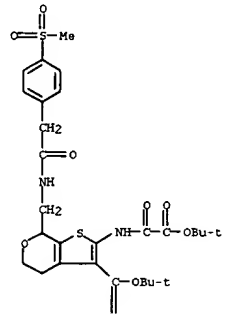
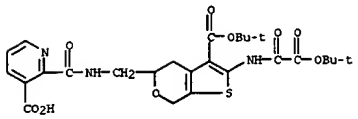


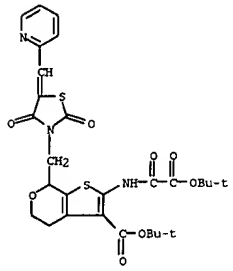
PAGE 2-A

RN 330192-81-9 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[[[3-[(1,1-dimethylethoxy)carbonyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

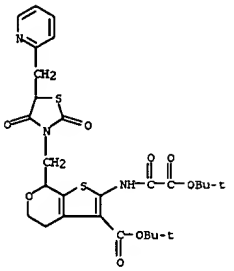


RN 330192-82-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-7-[[2,4-dioxo-5-(2-pyridinylmethylene)-3-thiazolidinyl]methyl]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



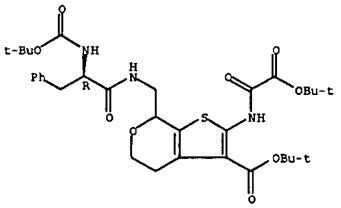
RN 330192-84-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-7-[[2,4-dioxo-5-(2-pyridinylmethyl)-3-thiazolidinyl]methyl]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-90-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-3-phenylpropyl]amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

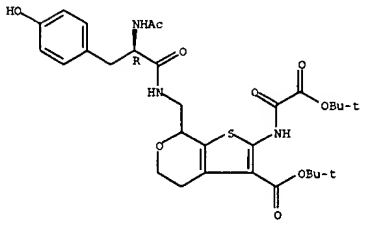
Absolute stereochemistry.



RN 330192-91-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-(acetylamino)-3-(4-hydroxyphenyl)-1-oxopropyl]amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

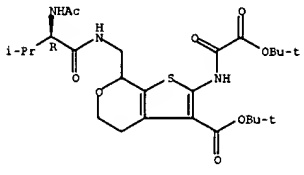
Absolute stereochemistry.

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

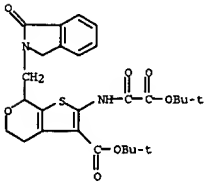


RN 330192-93-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-(acetylamino)-3-methyl-1-oxobutyl]amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

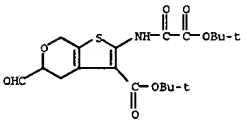


RN 330193-42-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(1,3-dihydro-1-oxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

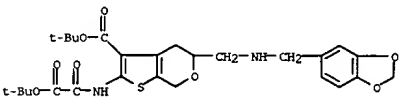


L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

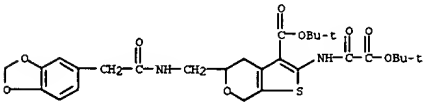
RN 330193-46-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-5-formyl-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 330193-47-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[(1,3-benzodioxol-5-ylmethyl)amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

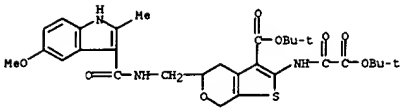


RN 330193-52-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[(1,3-benzodioxol-5-ylacetyl)amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

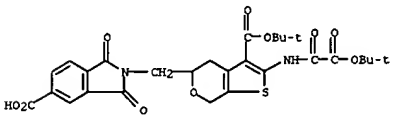


RN 330193-55-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[[[(5-methoxy-2-methyl-1H-indol-3-yl)carbonyl]amino]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

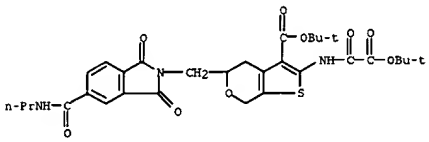
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330193-57-2 CAPLUS
CN 1H-Isoindole-5-carboxylic acid, 2-[[3-[(1,1-dimethylethoxy)carbonyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl]-2,3-dihydro-1,3-dioxo- (9CI) (CA INDEX NAME)

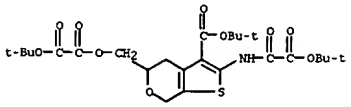


RN 330193-58-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[1,3-dihydro-1,3-dioxo-5-[(propylamino)carbonyl]-2H-isoindol-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

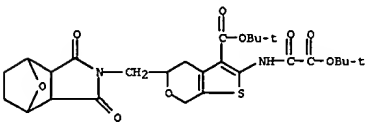


RN 330653-63-9 CAPLUS
CN Ethanedioic acid, [3-[(1,1-dimethylethoxy)carbonyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

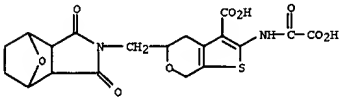


RN 330653-65-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[(octahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



IT **330653-64-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of 2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acids as PTP1B inhibitors for treatment of diabetes, impaired glucose tolerance, insulin resistance, obesity, and other diseases)

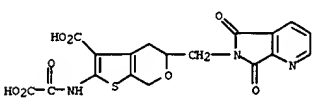
RN 330653-64-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[(octahydro-1,3-dioxo-4,7-epoxy-1H-isoindol-2-yl)methyl]- (9CI) (CA INDEX NAME)



IT **243967-61-5P 243967-62-6P 243967-63-7P**
243967-64-8P 243967-71-7P 243967-72-8P
243967-73-9P 243967-74-0P 243967-75-1P

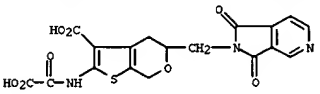
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
243967-61-5P 330191-23-6P 330191-24-7P,
7-(2,4-Dioxothiazolidin-3-ylmethyl)-2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid **330191-25-8P**
330191-26-9P 330191-27-0P 330191-28-1P
330191-29-2P 330191-30-5P 330191-31-6P
330191-32-7P 330191-33-8P 330191-34-9P,
2-(Oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3,7-dicarboxylic acid 7-ethyl ester **330191-35-0P,** 7-Benzylcarbamoyl-2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid **330191-36-1P**
330191-37-2P 330191-38-3P 330191-39-4P
330191-40-7P, 2-[[[3-Carboxy-2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl]carbamoyl]nicotinic acid
330191-41-8P 330191-43-0P 330191-44-1P
330191-45-2P 330191-46-3P 330191-47-4P
330191-48-5P, 7-[[5-(3,5-Dimethoxybenzylidene)-2,4-dioxothiazolidin-3-yl]methyl]-2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid **330191-49-6P 330191-50-9P**
330191-53-2P 330191-55-4P 330191-56-5P
330191-57-6P 330191-58-7P 330191-59-8P
330192-23-9P 330192-28-4P 330192-69-3P,
5-Benzylcarbamoyl-2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid **330192-87-5P 330193-29-8P**
330193-30-1P 330193-31-2P 330193-32-3P
330193-33-4P 330193-34-5P 330193-35-6P
330193-36-7P 330193-37-8P 330193-38-9P
330193-39-0P 330193-40-3P 330193-43-6P,
2-(Oxalylamino)-5-(2,2,2-trifluoroacetoxymethyl)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid **330193-44-7P 330193-45-8P**
330193-48-1P 330193-49-2P 330193-50-5P
330193-53-8P 330653-66-2P 330653-69-5P
330653-71-9P 330653-72-0P 330653-73-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acids as PTP1B inhibitors for treatment of diabetes, impaired glucose tolerance, insulin resistance, obesity, and other diseases)

RN 243967-61-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

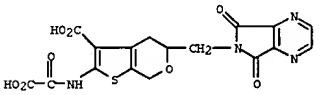


RN 243967-62-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-c]pyridin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

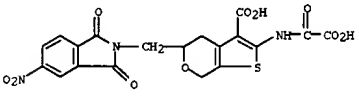
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



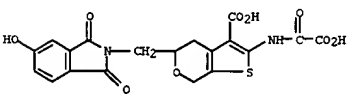
RN 243967-63-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyrazin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-64-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-5-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

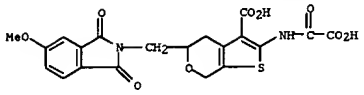


RN 243967-71-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-5-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

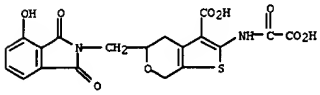


RN 243967-72-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-5-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

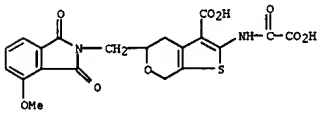
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



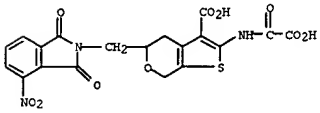
RN 243967-73-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-4-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



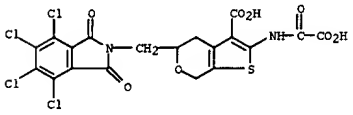
RN 243967-74-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-4-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



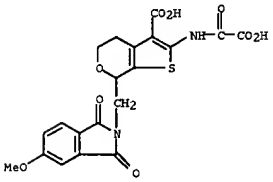
RN 243967-75-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-4-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



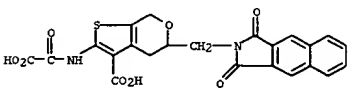
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



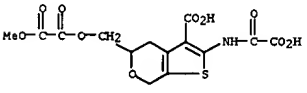
RN 330191-26-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,3-dihydro-5-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 330191-27-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-1,3-dioxo-2H-benz[f]isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

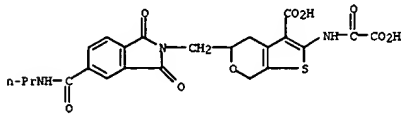


RN 330191-28-1 CAPLUS
CN Ethanedioic acid, [3-carboxy-2-[(carboxycarbonyl)amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl methyl ester (9CI) (CA INDEX NAME)

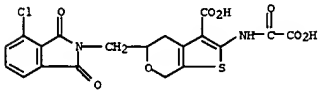


L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

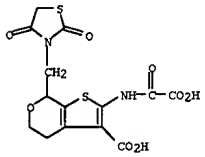
RN 243967-81-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[1,3-dihydro-1,3-dioxo-5-[(propylamino)carbonyl]-2H-isoindol-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 330191-23-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(4-chloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



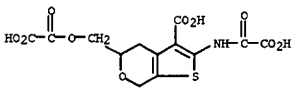
RN 330191-24-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(2,4-dioxo-3-thiazolidinyl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



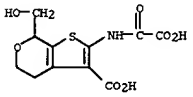
RN 330191-25-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[(4,5,6,7-tetrachloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

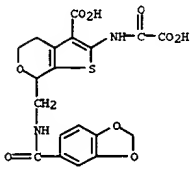
RN 330191-29-2 CAPLUS
CN Ethanedioic acid, mono[[3-carboxy-2-[(carboxycarbonyl)amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl] ester (9CI) (CA INDEX NAME)



RN 330191-30-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-(hydroxymethyl)- (9CI) (CA INDEX NAME)

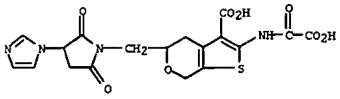


RN 330191-31-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[(1,3-benzodioxol-5-ylcarbonyl)amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

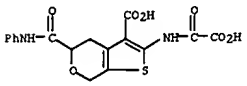


RN 330191-32-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[3-(1H-imidazol-1-yl)-2,5-dioxo-1-pyrrolidinyl]methyl]- (9CI) (CA INDEX NAME)

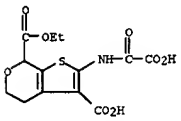
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



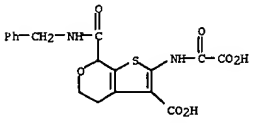
RN 330191-33-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[(phenylamino)carbonyl]- (9CI) (CA INDEX NAME)



RN 330191-34-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3,7-dicarboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, 7-ethyl ester (9CI) (CA INDEX NAME)

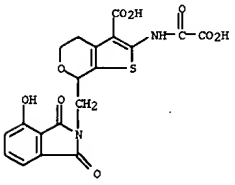


RN 330191-35-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[[(phenylmethyl)amino]carbonyl]- (9CI) (CA INDEX NAME)

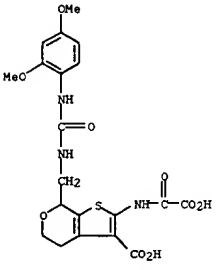


RN 330191-36-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[4-

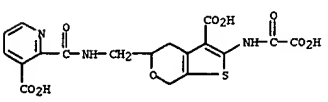
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330191-39-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[[[(2,4-dimethoxyphenyl)amino]carbonyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

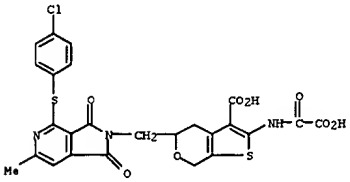


RN 330191-40-7 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[[[3-carboxy-2-[(carboxycarbonyl)amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

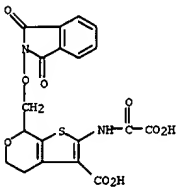


RN 330191-41-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(4-

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
[(4-chlorophenyl)thio]-1,3-dihydro-6-methyl-1,3-dioxo-2H-pyrrolo[3,4-c]pyridin-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

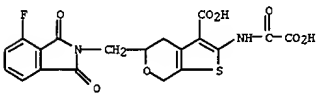


RN 330191-37-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

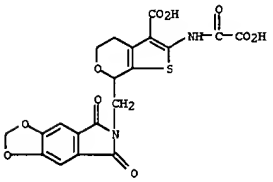


RN 330191-38-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,3-dihydro-4-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

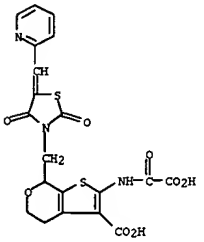
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
fluoro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



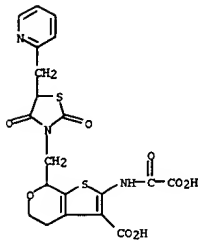
RN 330191-43-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(5,7-dihydro-5,7-dioxo-6H-1,3-dioxolo[4,5-f]isoindol-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



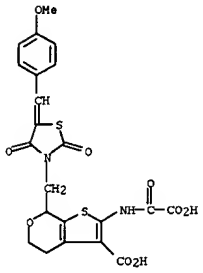
RN 330191-44-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[2,4-dioxo-5-(2-pyridinylmethylene)-3-thiazolidinyl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RN 330191-45-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[2,4-dioxo-5-(2-pyridinylmethyl)-3-thiazolidinyl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

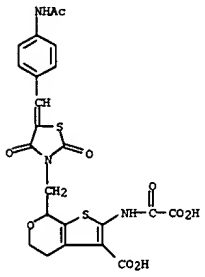


RN 330191-46-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[[5-[(4-methoxyphenyl)methylene]-2,4-dioxo-3-thiazolidinyl]methyl]- (9CI) (CA INDEX NAME)

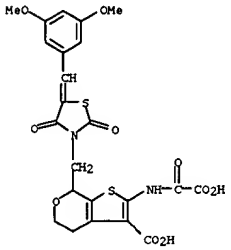


RN 330191-47-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[5-[[4-(acetylamino)phenyl]methylene]-2,4-dioxo-3-thiazolidinyl]methyl]-2-

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

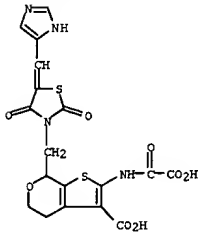


RN 330191-48-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[5-[(3,5-dimethoxyphenyl)methylene]-2,4-dioxo-3-thiazolidinyl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

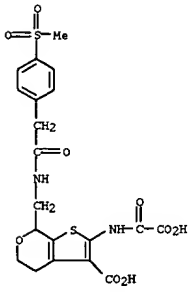


RN 330191-49-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[[5-(1H-imidazol-4-ylmethylene)-2,4-dioxo-3-thiazolidinyl]methyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



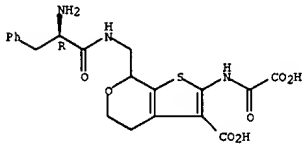
RN 330191-50-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[[[[4-(methylsulfonyl)phenyl]acetyl]amino]methyl]- (9CI) (CA INDEX NAME)



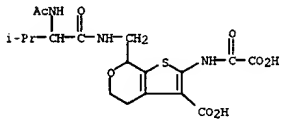
RN 330191-53-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

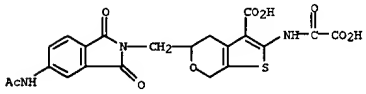
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



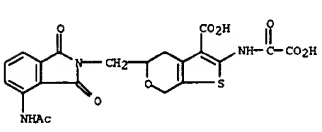
RN 330191-55-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[2-(acetylamino)-3-methyl-1-oxobutyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 330191-56-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[5-(acetylamino)-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

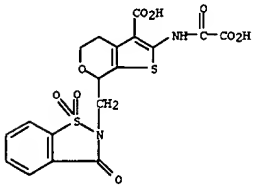


RN 330191-57-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[4-(acetylamino)-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

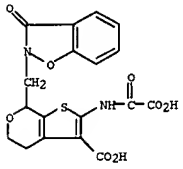


L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 330191-58-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,1-dioxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



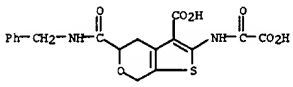
RN 330191-59-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[(3-oxo-1,2-benzisoxazol-2(3H)-yl)methyl]- (9CI) (CA INDEX NAME)



RN 330192-23-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[1,3-dihydro-1,3-dioxo-4-(phenylmethoxy)-2H-isoindol-2-yl]methyl]-4,7-dihydro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 330191-42-9
CMF C26 H20 N2 O9 S

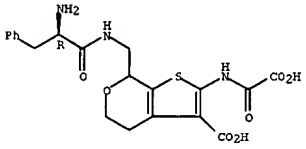


RN 330192-87-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 330191-53-2
CMF C20 H21 N3 O7 S

Absolute stereochemistry.

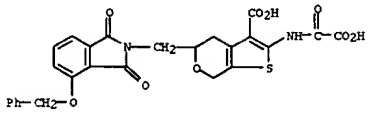


CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 330193-29-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,1-dioxido-3-oxo-5-phenyl-2(3H)-isothiazolyl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

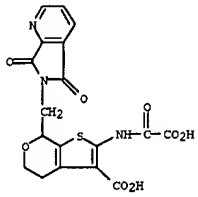
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CM 2

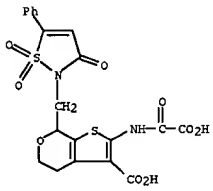
CRN 76-05-1
CMF C2 H F3 O2

RN 330192-28-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

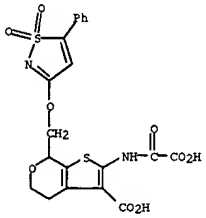


RN 330192-69-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(phenylmethyl)amino]carbonyl]- (9CI) (CA INDEX NAME)

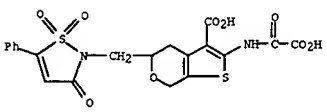
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330193-30-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[(1,1-dioxido-5-phenyl-3-isothiazolyl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

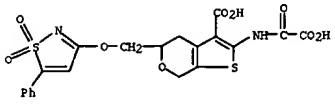


RN 330193-31-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,1-dioxido-3-oxo-5-phenyl-2(3H)-isothiazolyl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

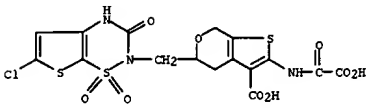


RN 330193-32-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,1-dioxido-5-phenyl-3-isothiazolyl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

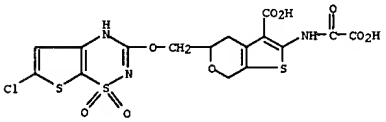
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330193-33-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(6-chloro-3,4-dihydro-3-oxo-1,1-dioxido-2H-thieno[3,2-e]-1,2,4-thiadiazin-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

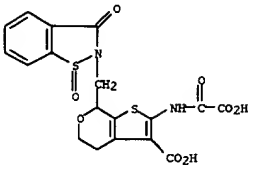


RN 330193-34-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(6-chloro-1,1-dioxido-2H-thieno[3,2-e]-1,2,4-thiadiazin-3-yl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

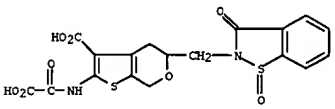


RN 330193-35-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[(1-oxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl]- (9CI) (CA INDEX NAME)

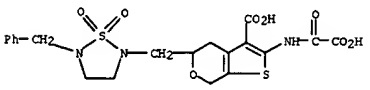
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330193-36-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[(1-oxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl]- (9CI) (CA INDEX NAME)

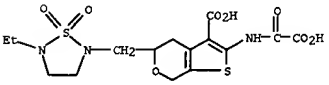


RN 330193-37-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[1,1-dioxido-5-(phenylmethyl)-1,2,5-thiadiazolidin-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

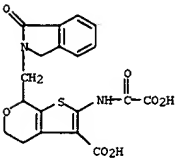


RN 330193-38-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[5-ethyl-1,1-dioxido-1,2,5-thiadiazolidin-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



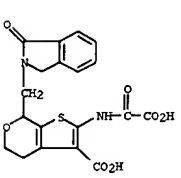
RN 330193-39-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,3-dihydro-1-oxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 330193-40-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,3-dihydro-1-oxo-2H-isoindol-2-yl)methyl]-4,7-dihydro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 330193-39-0
CMF C19 H16 N2 O7 S

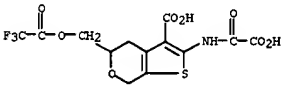


CM 2

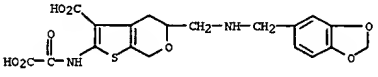
CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 330193-43-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(trifluoroacetyl)oxy]methyl]- (9CI) (CA INDEX NAME)



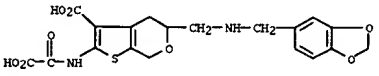
RN 330193-44-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[(1,3-benzodioxol-5-ylmethyl)amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 330193-45-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[(1,3-benzodioxol-5-ylmethyl)amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 330193-44-7
CMF C19 H18 N2 O8 S

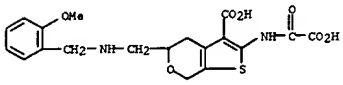


CM 2

CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

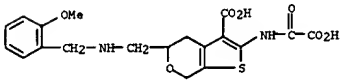
RN 330193-48-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(2-methoxyphenyl)methyl]amino]methyl]- (9CI) (CA INDEX NAME)



RN 330193-49-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(2-methoxyphenyl)methyl]amino]methyl]-, trifluoroacetate (4:3) (9CI) (CA INDEX NAME)

CM 1

CRN 330193-48-1
CMF C19 H20 N2 O7 S



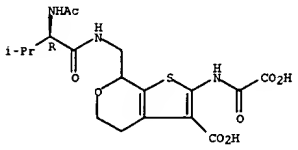
CM 2

CRN 76-05-1
CMF C2 H F3 O2

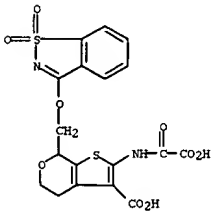
RN 330193-50-5 CAPLUS

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 330653-71-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[(1,1-dioxido-1,2-benzisothiazol-3-yl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

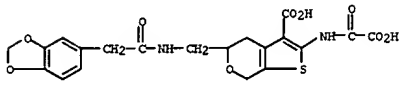


RN 330653-72-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[(1,1-dioxido-1,2-benzisothiazol-3-yl)oxy]methyl]-4,7-dihydro-, compd. with ethyl acetate (5:3) (9CI) (CA INDEX NAME)

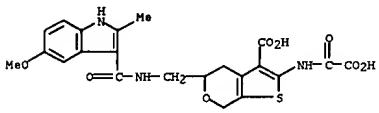
CM 1

CRN 330653-71-9
CMF C18 H14 N2 O9 S2

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[(1,3-benzodioxol-5-ylacetyl)amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

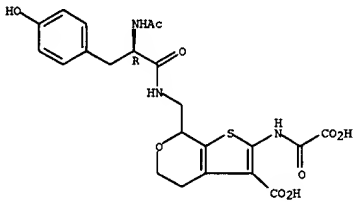


RN 330193-53-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(5-methoxy-2-methyl-1H-indol-3-yl)carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)



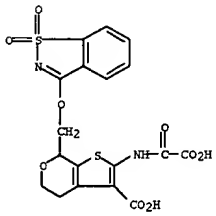
RN 330653-66-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-(acetylamino)-3-(4-hydroxyphenyl)-1-oxopropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 330653-69-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-(acetylamino)-3-methyl-1-oxobutyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro-

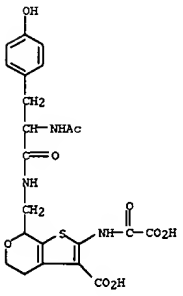
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CM 2

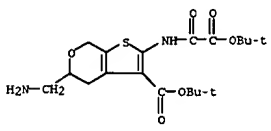
CRN 141-78-6
CMF C4 H8 O2

RN 330653-73-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[2-(acetylamino)-3-(4-hydroxyphenyl)-1-oxopropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

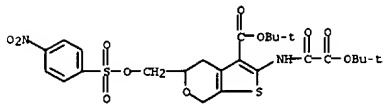


IT 243968-53-8 330192-17-1 330192-21-7
330192-29-5 330192-85-3
RL: RCT (Reactant); RACT (Reactant or reagent)

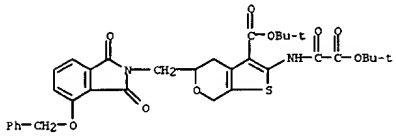
L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(reactant; prepn. of 2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acids as PTP1B inhibitors for treatment of diabetes, impaired glucose tolerance, insulin resistance, obesity, and other diseases)
RN 243968-53-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-(aminomethyl)-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



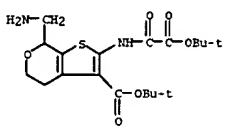
RN 330192-17-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[[[(4-nitrophenyl)sulfonyl]oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



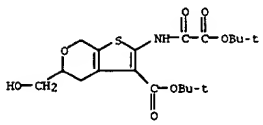
RN 330192-21-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[1,3-dihydro-1,3-dioxo-4-(phenylmethoxy)-2H-isoindol-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RN 330192-29-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-(aminomethyl)-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 330192-85-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-(hydroxymethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

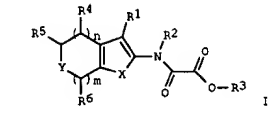
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:185561 CAPLUS
DOCUMENT NUMBER: 134:237465
TITLE: Method of inhibiting protein tyrosine phosphatases with an aspartic acid residue at position 48
INVENTOR(S): Andersen, Henrik Sune; Hansen, Thomas Kruse; Iverson, Lars Fogh; Lau, Jesper; Moller, Niels Peter Hundahl; Olsen, Ole Hvilsted; Axe, Frank Urban; Ge, Yu; Holsworth, Daniel Dale; Jones, Todd Kevin; Judge, Luke Milburn; Ripka, William Charles; Shapira, Barry Zvi; Uyeda, Roy Teruyuki
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.; Ontogen Corp.
SOURCE: PCT Int. Appl., 644 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001017516	A2	20010315	WO 2000-US24761	20000911
WO 2001017516	A3	20011108		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1214060	A2	20020619	EP 2000-963340	20000911
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.: DK 1999-1279 A 19990910
US 1999-156641P P 19990929
WO 2000-US24761 W 20000911

GI

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



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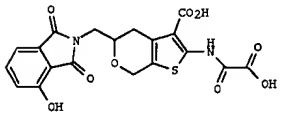
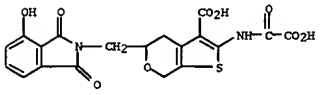


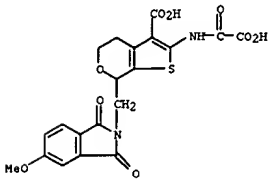
II

AB The present invention provides a method of inhibiting protein tyrosine phosphatases (PTPases, PTPs), such as PTP1B, TC-PTP, CD45, SHP-1, PTPα, PTPε, PTPβ, PTP D1, PTP D2, PTPH1, and PTP-LAR, by administration of compds. which have structural, phys., and spatial characteristics that allow them to interact with an aspartic acid residue at position 48 of PTP1B and/or TC-PTP. Prepns. for over 100 thieno[2,3-c]pyrans and thieno[2,3-c]pyridines (I) [wherein n = 0-2; m = 0-2; and m = n ≥ 1; X = S, O, NR8; Y = NR8, O, S, SO, SO2; R1 = H, CO2R3, or a 5-membered heterocycle such as tetrazolyl, 3-hydroxyisoxazolyl, 3-hydroxyisothiazolyl, 3-hydroxypyrazolyl, 2-(hydroxy or thio)-1,3,4-oxadiazolyl, 2-oxoimidazolyl, etc.; R2 = H, alkyl, OH, or NR9R10; R3 = H, (ar)alkyl, or alkylcarbonyloxy(ar)alkyl; R4 - R6 = independently H, trihalomethyl, (ar)alkyl, aryl, OH, oxo, CO2H, carboxyalkyl, (ar)alkyloxycarbonyl, alkylaminoalkyl, (ar)alkylcarbonylamino, etc.; R8 - R10 = independently H or (un)substituted (ar)alkyl, aryl, (ar)alkylcarbonyl, arylcarbonyl, or (ar)alkylcarboxy; or R9 and R10 together with the N to which they are attached form an (un)substituted cyclic, bicyclic, or tricyclic ring system containing 0-3 heteroatoms; or R9 and R10 = independently a 5-7 membered cyclic amine, imide, or lactam] and structural-based PTPase inhibition data are included. For example, 5-(4-benzyloxy-1,3-dioxo-1,3-dihydroisoindol-2-ylmethyl)-2-(tert-butoxyoxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid tert-Bu ester was debenzylated using Pd/C and treated with 25% TFA in CH2Cl2 to give II. II showed potency against PTP1B, PTPα D1, PTPε D1, PTPβ, and CD45 D1D2 with Ki values (μM) of 1.9, 93, 11, 1.1, and 130, resp. I are indicated in the management or treatment of a broad range of diseases such as autoimmune diseases, acute and chronic inflammation, osteoporosis, various forms of cancer and malignant diseases, and type I diabetes and type II diabetes (no data). In addition, I are useful in the isolation of PTPases and in elucidation of their biol. function.
IT **243967-73-9D**, 5-(4-Hydroxy-1,3-dioxo-1,3-dihydroisoindol-2-ylmethyl)-2-(oxalylamino)-4,7-dihydrothieno[2,3-c]pyran-3-carboxylic acid, complex with PTP1B **330191-26-9D**, complex with PTP1B **330191-58-7D**, complex with PTP1B
RL: PRP (Properties)
(crystal structure of PTP1B complex with PTPase inhibitor)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RN 243967-73-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-4-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

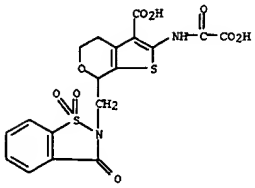


RN 330191-26-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,3-dihydro-5-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

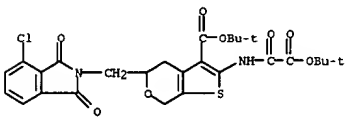


RN 330191-58-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,1-dioxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

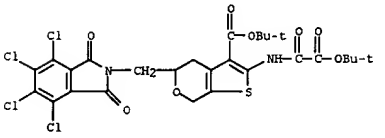


IT **330192-16-0P 330192-18-2P 330192-20-6P**
330192-22-8P 330192-24-0P 330192-25-1P
330192-27-3P 330192-30-8P 330192-31-9P
330192-32-0P 330192-33-1P 330192-36-4P
330192-38-6P 330192-39-7P 330192-41-1P
330192-43-3P 330192-46-6P 330192-50-2P
330192-51-3P 330192-52-4P 330192-53-5P
330192-55-7P 330192-56-8P 330192-59-1P
330192-61-5P 330192-63-7P 330192-68-2P
330192-71-7P 330192-72-8P 330192-76-2P
330192-78-4P 330192-81-9P 330192-82-0P
330192-84-2P 330192-86-4P 330192-90-0P
330192-91-1P 330192-93-3P 330193-42-5P
330193-46-9P 330193-47-0P 330193-52-7P
330193-55-0P 330193-57-2P 330193-58-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; structure-based design and preparation of selective inhibitors of protein tyrosine phosphatases)
RN 330192-16-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(4-chloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

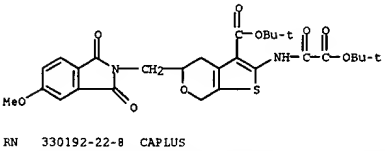


RN 330192-18-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[(4,5,6,7-tetrachloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, 1,1-dimethylethyl ester (9CI)

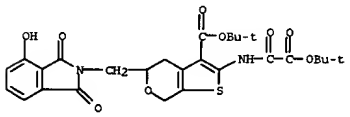
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(CA INDEX NAME)



RN 330192-20-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-5-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

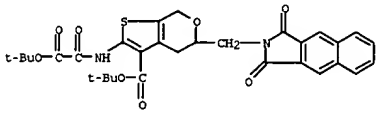


RN 330192-22-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-4-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

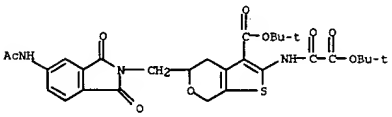


RN 330192-24-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-1,3-dioxo-2H-benz[f]isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

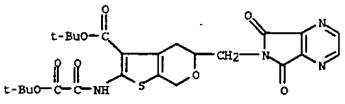
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-25-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[5-(acetylamino)-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

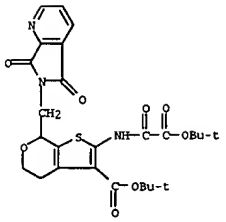


RN 330192-27-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyrazin-6-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

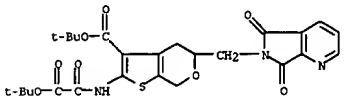


RN 330192-30-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

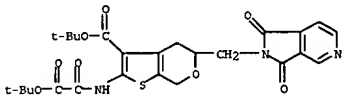
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-31-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

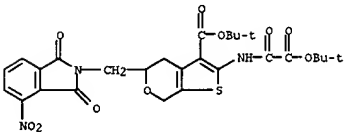


RN 330192-32-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-1,3-dioxo-2H-pyrrolo[3,4-c]pyridin-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

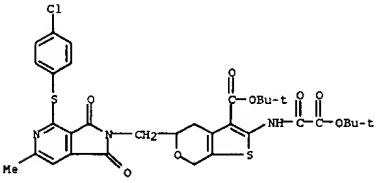


RN 330192-33-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-5-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

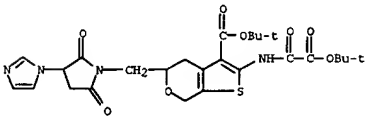
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-41-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[4-[(4-chlorophenyl)thio]-1,3-dihydro-6-methyl-1,3-dioxo-2H-pyrrolo[3,4-c]pyridin-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

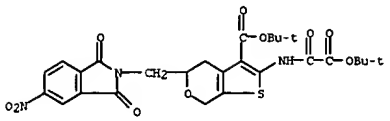


RN 330192-43-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[[3-(1H-imidazol-1-yl)-2,5-dioxo-1-pyrrolidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

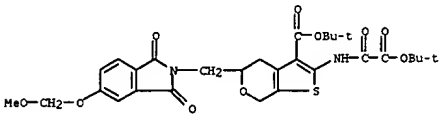


RN 330192-46-6 CAPLUS
CN Ethanedioic acid, [3-[(1,1-dimethylethoxy)carbonyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl methyl ester (9CI) (CA INDEX NAME)

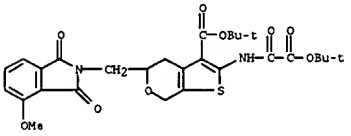
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-36-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[1,3-dihydro-5-(methoxymethoxy)-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

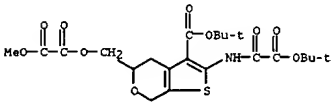


RN 330192-38-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-4-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

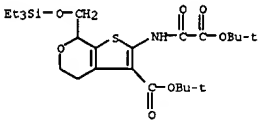


RN 330192-39-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-4-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

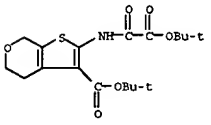
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



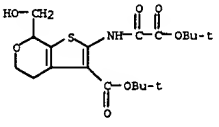
RN 330192-50-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-7-[[(triethylsilyl)oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 330192-51-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

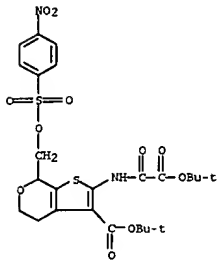


RN 330192-52-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-7-(hydroxymethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

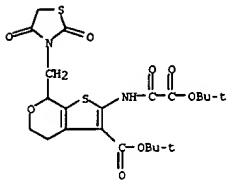


RN 330192-53-5 CAPLUS

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-7-[[[(4-nitrophenyl)sulfonyl]oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

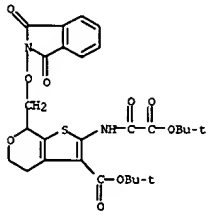


RN 330192-55-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-7-[(2,4-dioxo-3-thiazolidinyl)methyl]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

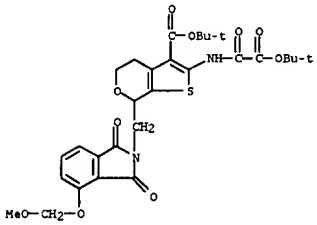


RN 330192-56-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)oxy]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

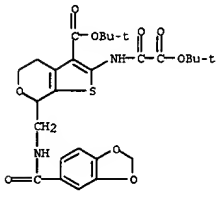


RN 330192-59-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[1,3-dihydro-4-(methoxymethoxy)-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

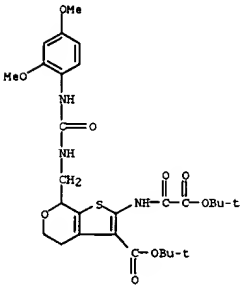


RN 330192-61-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[(1,3-benzodioxol-5-ylcarbonyl)amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

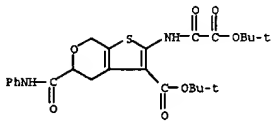


RN 330192-63-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[[(2,4-dimethoxyphenyl)amino]carbonyl]amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

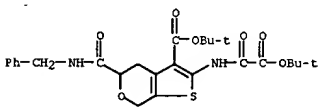


RN 330192-68-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[(phenylamino)carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

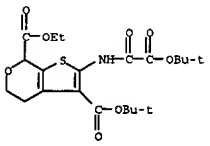
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-71-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[[(phenylmethyl)amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

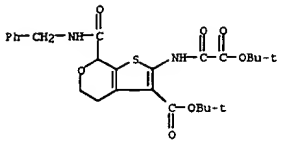


RN 330192-72-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3,7-dicarboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 3-(1,1-dimethylethyl) 7-ethyl ester (9CI) (CA INDEX NAME)



RN 330192-76-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-7-[[(phenylmethyl)amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-78-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-7-[[[[4-(methylsulfonyl)phenyl]acetyl]amino]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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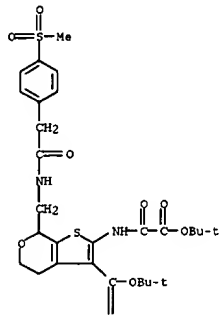

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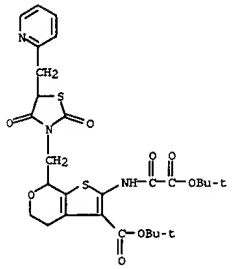
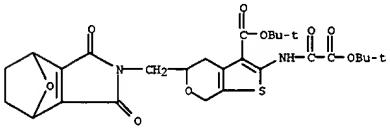
RN 330192-81-9 CAPLUS

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-86-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-5-[(1,3,4,5,6,7-hexahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)methyl]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

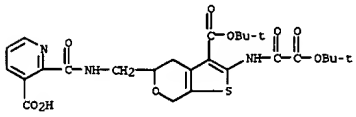


RN 330192-90-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-3-phenylpropyl]amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

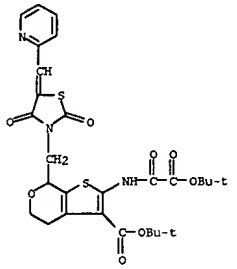
Absolute stereochemistry.

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

3-Pyridinecarboxylic acid, 2-[[[[3-[(1,1-dimethylethoxy)carbonyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

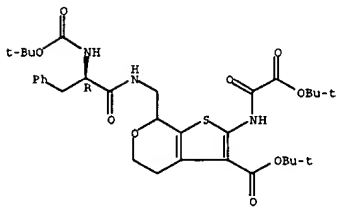


RN 330192-82-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-7-[[2,4-dioxo-5-(2-pyridinylmethylene)-3-thiazolidinyl]methyl]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



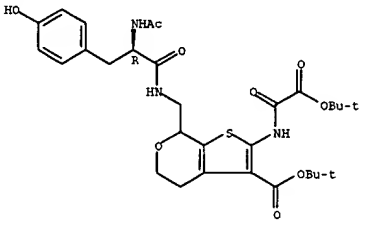
RN 330192-84-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-7-[[2,4-dioxo-5-(2-pyridinylmethyl)-3-thiazolidinyl]methyl]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330192-91-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-(acetylamino)-3-(4-hydroxyphenyl)-1-oxopropyl]amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

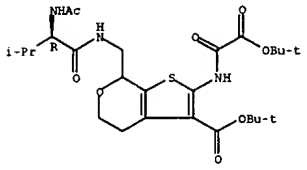
Absolute stereochemistry.



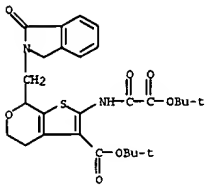
RN 330192-93-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-(acetylamino)-3-methyl-1-oxobutyl]amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

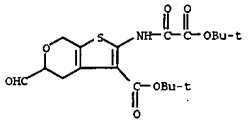
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330193-42-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(1,3-dihydro-1-oxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

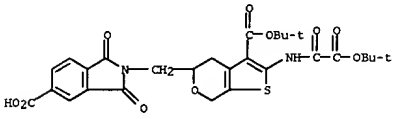


RN 330193-46-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-5-formyl-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

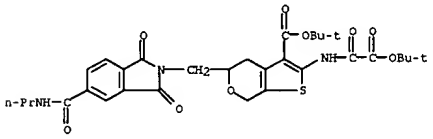


RN 330193-47-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[(1,3-benzodioxol-5-ylmethyl)amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

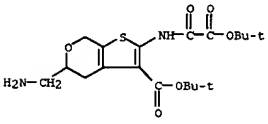


RN 330193-58-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[1,3-dihydro-1,3-dioxo-5-[(propylamino)carbonyl]-2H-isoindol-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



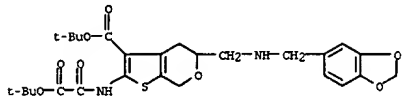
IT **243968-53-8 330192-17-1 330192-21-7 330192-29-5 330192-85-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; structure-based design and preparation of selective inhibitors of protein tyrosine phosphatases)

RN 243968-53-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-(aminomethyl)-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

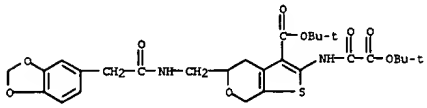


RN 330192-17-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[[[(4-nitrophenyl)sulfonyl]oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

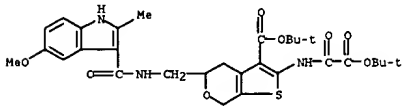
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 330193-52-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[(1,3-benzodioxol-5-ylacetyl)amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

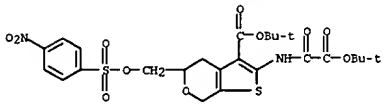


RN 330193-55-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[[[(5-methoxy-2-methyl-1H-indol-3-yl)carbonyl]amino]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

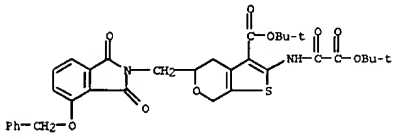


RN 330193-57-2 CAPLUS
CN 1H-Isoindole-5-carboxylic acid, 2-[[3-[(1,1-dimethylethoxy)carbonyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl]-2,3-dihydro-1,3-dioxo- (9CI) (CA INDEX NAME)

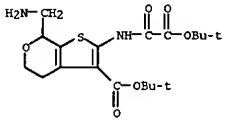
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



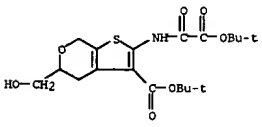
RN 330192-21-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[1,3-dihydro-1,3-dioxo-4-(phenylmethoxy)-2H-isoindol-2-yl]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 330192-29-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-(aminomethyl)-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 330192-85-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-(hydroxymethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

IT 243967-61-5P 243967-62-6P 243967-63-7P
243967-64-8P 243967-71-7P 243967-72-8P
243967-73-9P 243967-74-0P 243967-75-1P
243967-81-9P 330191-23-6P 330191-24-7P
330191-25-8P 330191-26-9P 330191-27-0P
330191-28-1P 330191-29-2P 330191-30-5P
330191-31-6P 330191-32-7P 330191-33-8P
330191-34-9P 330191-35-0P 330191-36-1P
330191-37-2P 330191-38-3P 330191-39-4P
330191-40-7P 330191-41-8P 330191-42-9P
330191-43-0P 330191-44-1P 330191-45-2P
330191-46-3P 330191-47-4P 330191-48-5P
330191-49-6P 330191-50-9P 330191-51-0P
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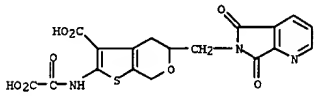
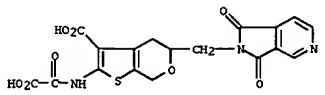
330193-32-3P 330193-33-4P 330193-34-5P
330193-35-6P 330193-36-7P 330193-37-8P
330193-38-9P 330193-40-3P 330193-43-6P
330193-45-8P 330193-49-2P 330193-50-5P
330193-53-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(structure-based design and preparation of selective inhibitors of protein
tyrosine phosphatases)

RN 243967-61-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

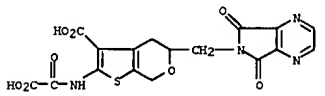


RN 243967-62-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-c]pyridin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

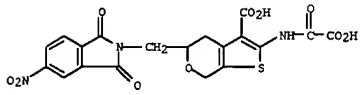
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



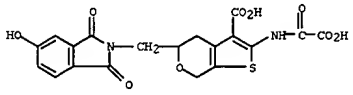
RN 243967-63-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyrazin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-64-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-5-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

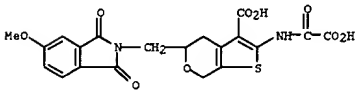


RN 243967-71-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-5-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

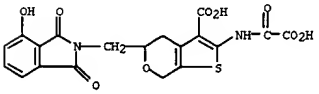


RN 243967-72-8 CAPLUS

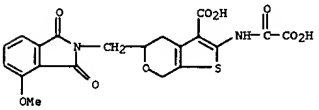
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-5-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-73-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-4-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

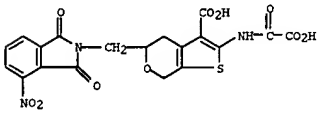


RN 243967-74-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-4-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

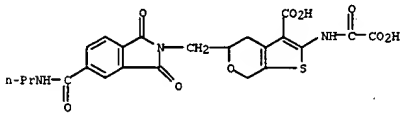


RN 243967-75-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-4-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

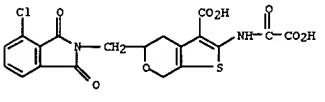
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



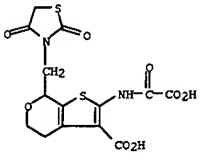
RN 243967-81-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-1,3-dioxo-5-[(propylamino)carbonyl]-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 330191-23-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(4-chloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

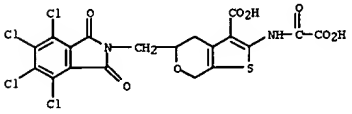


RN 330191-24-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(2,4-dioxo-3-thiazolidinyl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

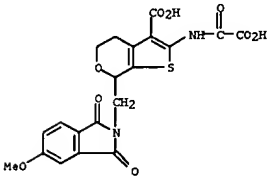


L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

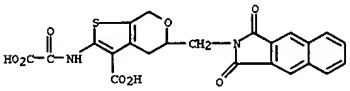
RN 330191-25-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[(4,5,6,7-tetrachloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]- (9CI) (CA INDEX NAME)



RN 330191-26-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,3-dihydro-5-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

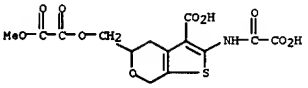


RN 330191-27-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-1,3-dioxo-2H-benz[f]isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

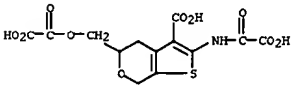


RN 330191-28-1 CAPLUS
CN Ethanedioic acid, [3-carboxy-2-[(carboxycarbonyl)amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl methyl ester (9CI) (CA INDEX NAME)

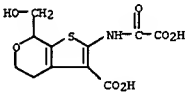
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330191-29-2 CAPLUS
CN Ethanedioic acid, mono[[3-carboxy-2-[(carboxycarbonyl)amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl] ester (9CI) (CA INDEX NAME)

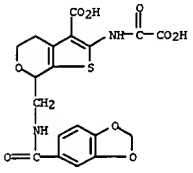


RN 330191-30-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-(hydroxymethyl)- (9CI) (CA INDEX NAME)

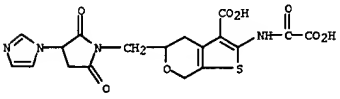


RN 330191-31-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[(1,3-benzodioxol-5-ylcarbonyl)amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

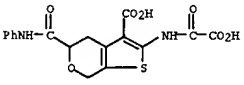
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



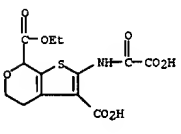
RN 330191-32-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[3-(1H-imidazol-1-yl)-2,5-dioxo-1-pyrrolidinyl]methyl]- (9CI) (CA INDEX NAME)



RN 330191-33-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[(phenylamino)carbonyl]- (9CI) (CA INDEX NAME)

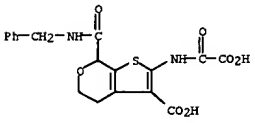


RN 330191-34-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3,7-dicarboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, 7-ethyl ester (9CI) (CA INDEX NAME)

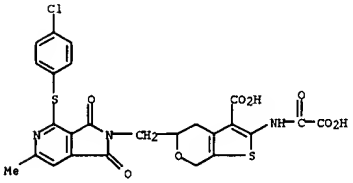


RN 330191-35-0 CAPLUS

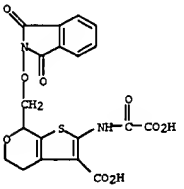
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[[(phenylmethyl)amino]carbonyl]- (9CI) (CA INDEX NAME)



RN 330191-36-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[4-[(4-chlorophenyl)thio]-1,3-dihydro-6-methyl-1,3-dioxo-2H-pyrrolo[3,4-c]pyridin-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

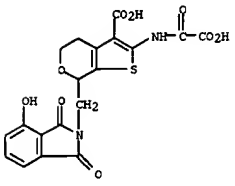


RN 330191-37-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

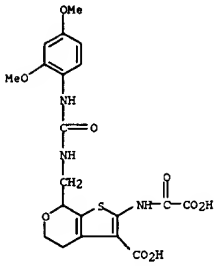


RN 330191-38-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,3-dihydro-4-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro-

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(9CI) (CA INDEX NAME)

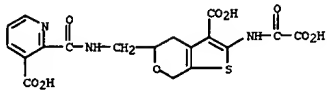


RN 330191-39-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[[[(2,4-dimethoxyphenyl)amino]carbonyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

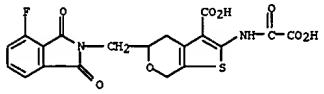


RN 330191-40-7 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[[[3-carboxy-2-[(carboxycarbonyl)amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

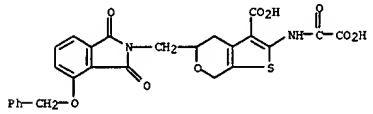
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330191-41-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(4-fluoro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

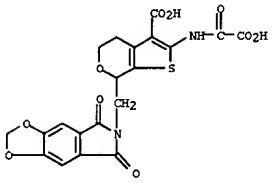


RN 330191-42-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[1,3-dihydro-1,3-dioxo-4-(phenylmethoxy)-2H-isoindol-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

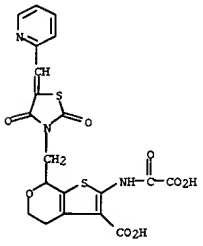


RN 330191-43-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(5,7-dihydro-5,7-dioxo-6H-1,3-dioxolo[4,5-f]isoindol-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

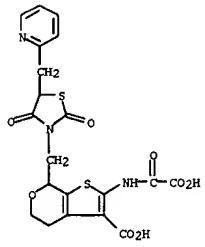


RN 330191-44-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[2,4-dioxo-5-(2-pyridinylmethylene)-3-thiazolidinyl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

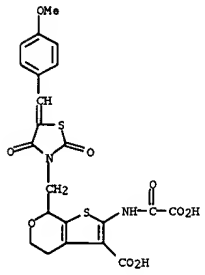


RN 330191-45-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[2,4-dioxo-5-(2-pyridinylmethyl)-3-thiazolidinyl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

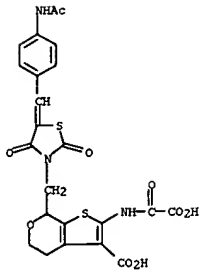


RN 330191-46-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[[5-[(4-methoxyphenyl)methylene]-2,4-dioxo-3-thiazolidinyl]methyl]- (9CI) (CA INDEX NAME)

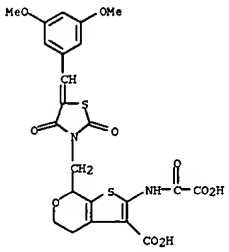


RN 330191-47-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[5-[[4-(acetylamino)phenyl]methylene]-2,4-dioxo-3-thiazolidinyl]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

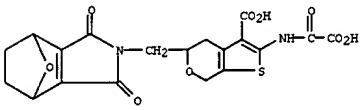


RN 330191-48-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[5-[(3,5-dimethoxyphenyl)methylene]-2,4-dioxo-3-thiazolidinyl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

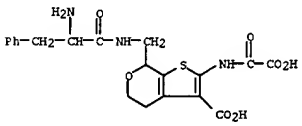


RN 330191-49-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[[5-(1H-imidazol-4-ylmethylene)-2,4-dioxo-3-thiazolidinyl]methyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

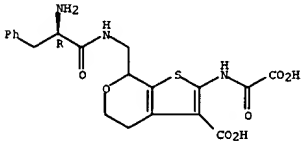


RN 330191-52-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[(2-amino-1-oxo-3-phenylpropyl)amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



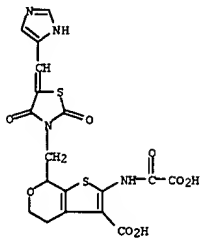
RN 330191-53-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

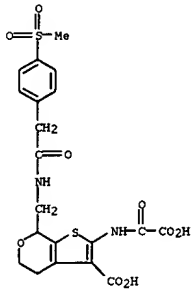


RN 330191-54-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-3-phenylpropyl]amino]methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

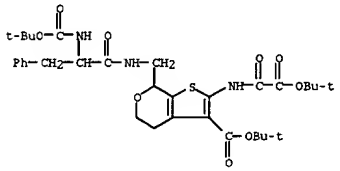


RN 330191-50-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[[[[4-(methylsulfonyl)phenyl]acetyl]amino]methyl]- (9CI) (CA INDEX NAME)

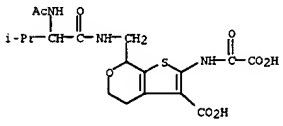


RN 330191-51-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3,4,5,6,7-hexahydro-1,3-dioxo-4,7-epoxy-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

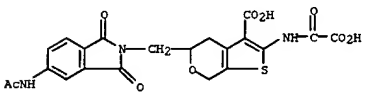
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330191-55-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[2-(acetylamino)-3-methyl-1-oxobutyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

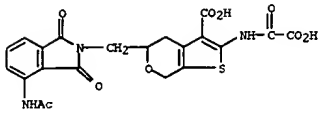


RN 330191-56-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[5-(acetylamino)-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

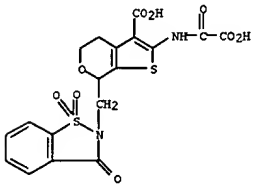


RN 330191-57-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[4-(acetylamino)-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

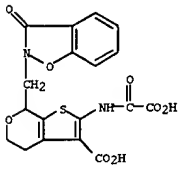
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330191-58-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,1-dioxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

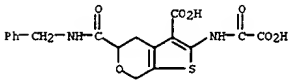


RN 330191-59-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[(3-oxo-1,2-benzisoxazol-2(3H)-yl)methyl]- (9CI) (CA INDEX NAME)



RN 330192-23-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[1,3-dihydro-1,3-dioxo-4-(phenylmethoxy)-2H-isoindol-2-yl]methyl]-4,7-

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(phenylmethyl)amino]carbonyl]- (9CI) (CA INDEX NAME)

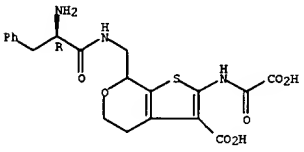


RN 330192-87-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[[[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 330191-53-2
CMF C20 H21 N3 O7 S

Absolute stereochemistry.



CM 2

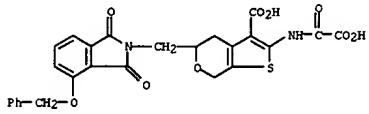
CRN 76-05-1
CMF C2 H F3 O2

RN 330193-29-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,1-dioxido-3-oxo-5-phenyl-2(3H)-isothiazolyl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
dihydro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

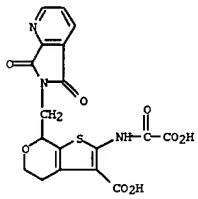
CRN 330191-42-9
CMF C26 H20 N2 O9 S



CM 2

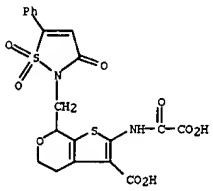
CRN 76-05-1
CMF C2 H F3 O2

RN 330192-28-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

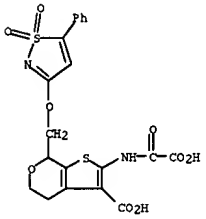


RN 330192-69-3 CAPLUS

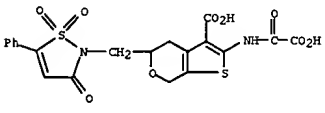
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330193-30-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[[(1,1-dioxido-5-phenyl-3-isothiazolyl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

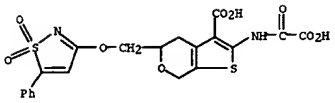


RN 330193-31-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,1-dioxido-3-oxo-5-phenyl-2(3H)-isothiazolyl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

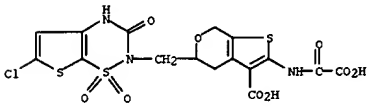


RN 330193-32-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,1-dioxido-5-phenyl-3-isothiazolyl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

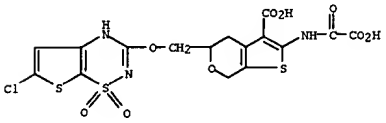
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330193-33-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(6-chloro-3,4-dihydro-3-oxo-1,1-dioxido-2H-thieno[3,2-e]-1,2,4-thiadiazin-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

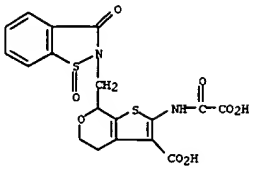


RN 330193-34-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(6-chloro-1,1-dioxido-2H-thieno[3,2-e]-1,2,4-thiadiazin-3-yl)oxy]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

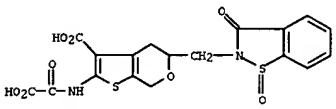


RN 330193-35-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-7-[(1-oxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl]- (9CI) (CA INDEX NAME)

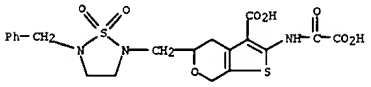
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330193-36-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[(1-oxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl]- (9CI) (CA INDEX NAME)

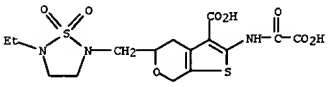


RN 330193-37-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[1,1-dioxido-5-(phenylmethyl)-1,2,5-thiadiazolidin-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 330193-38-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[5-ethyl-1,1-dioxido-1,2,5-thiadiazolidin-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

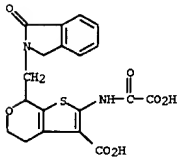
L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 330193-40-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,3-dihydro-1-oxo-2H-isoindol-2-yl)methyl]-4,7-dihydro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

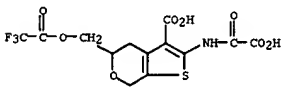
CRN 330193-39-0
CMF C19 H16 N2 O7 S



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 330193-43-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(trifluoroacetyl)oxy]methyl]- (9CI) (CA INDEX NAME)

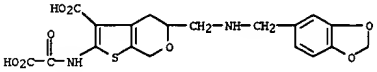


L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 330193-45-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[(1,3-benzodioxol-5-ylmethyl)amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 330193-44-7
CMF C19 H18 N2 O8 S



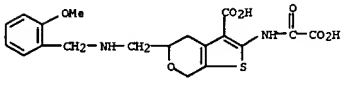
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 330193-49-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(2-methoxyphenyl)methyl]amino]methyl]-, trifluoroacetate (4:3) (9CI) (CA INDEX NAME)

CM 1

CRN 330193-48-1
CMF C19 H20 N2 O7 S

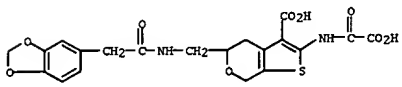


CM 2

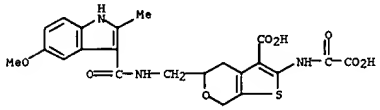
CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

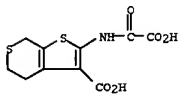
RN 330193-50-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[(1,3-benzodioxol-5-ylacetyl)amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 330193-53-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(5-methoxy-2-methyl-1H-indol-3-yl)carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)



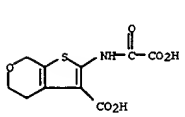
L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

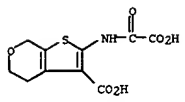
L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:438570 CAPLUS
DOCUMENT NUMBER: 133:219278
TITLE: Residue 259 is a key determinant of substrate specificity of protein-tyrosine phosphatases 1B and α
AUTHOR(S): Peters, Gunther H.; Iversen, Lars Fogh; Branner, Sven; Andersen, Henrik Sune; Mortensen, Steen B.; Olsen, Ole Hvilsted; Moller, Karin Bach; Moller, Niels Peter Hundahl
CORPORATE SOURCE: Department of Chemistry, Membrane and Statistical Physics Group (MEMPHYS), Technical University of Denmark, Lyngby, DK-2800, Den.
SOURCE: Journal of Biological Chemistry (2000), 275(24), 18201-18209
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The aim of this study was to define the structural elements that determine the differences in substrate recognition capacity of two protein-tyrosine phosphatases (PTPs), PTP1B and PTPα, both suggested to be neg. regulators of insulin signaling. Since the AcDADE(pY)L-NH2 peptide is well recognized by PTP1B, but less efficiently by PTPα, it was chosen as a tool for these analyses. Cα regiovariation analyses and primary sequence alignments indicate that residues 47, 48, 258, and 259 (PTP1B numbering) define a selectivity-determining region. By analyzing a set of DADE(pY)L analogs with a series of PTP mutants in which these four residues were exchanged between PTP1B and PTPα, either in combination or alone, we here demonstrate that the key selectivity-determining residue is 259. In PTPα, this residue is a glutamine causing steric hindrance and in PTP1B a glycine allowing broad substrate recognition. Significantly, replacing Gln259 with a glycine almost turns PTPα into a PTP1B-like enzyme. By using a novel set of PTP inhibitors and x-ray crystallog., we further provide evidence that Gln259 in PTPα plays a dual role leading to restricted substrate recognition (directly via steric hindrance) and reduced catalytic activity (indirectly via Gln262). Both effects may indicate that PTPα regulates highly selective signal transduction processes.
IT **243966-19-0**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(reaction kinetics of peptides with protein-tyrosine phosphatases 1B and α wild-type and mutant forms and crystal structure studies of 1B isoenzyme)
RN 243966-19-0 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:251041 CAPLUS
DOCUMENT NUMBER: 133:70565
TITLE: Structure-based design of a low molecular weight, nonphosphorus, nonpeptide, and highly selective inhibitor of protein-tyrosine phosphatase 1B
AUTHOR(S): Iversen, Lars Fogh; Andersen, Henrik Sune; Branner, Sven; Mortensen, Steen B.; Peters, Gunther H.; Norris, Kjeld; Olsen, Ole Hvilsted; Jeppesen, Claus Bekker; Lundt, Behrend F.; Ripka, William; Moller, Karin Bach; Moller, Niels Peter Hundahl
CORPORATE SOURCE: Protein Chemistry, Bagsvaerd, DK-2880, Den.
SOURCE: Journal of Biological Chemistry (2000), 275(14), 10300-10307
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Several protein-tyrosine phosphatases (PTPs) have been proposed to act as neg. regulators of insulin signaling. Recent studies have shown increased insulin sensitivity and resistance to obesity in PTP1B knockout mice, thus pointing to this enzyme as a potential drug target in diabetes. Structure-based design, guided by PTP mutants and x-ray protein crystallog., was used to optimize a relatively weak, nonphosphorus, nonpeptide general PTP inhibitor (2-(oxalyl-amino)-benzoic acid) into a highly selective PTP1B inhibitor. This was achieved by addressing residue 48 as a selectivity determining residue. By introducing a basic nitrogen in the core structure of the inhibitor, a salt bridge was formed to Asp-48 in PTP1B. In contrast, the basic nitrogen causes repulsion in other PTPs containing an asparagine in the equivalent position resulting in a remarkable selectivity for PTP1B. Importantly, this was accomplished while retaining the mol. weight of the inhibitor below 300 g/mol.
IT **243967-41-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(structure-based design of a low mol. weight, nonphosphorus, nonpeptide, and highly selective inhibitor of protein-tyrosine phosphatase 1B)
RN 243967-41-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



IT **243967-41-1D**, complexes with protein-tyrosine phosphatase 1B
RL: PRP (Properties)
(structure-based design of a low mol. weight, nonphosphorus, nonpeptide, and highly selective inhibitor of protein-tyrosine phosphatase 1B)
RN 243967-41-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-

L4 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
dihydro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:595178 CAPLUS
DOCUMENT NUMBER: 131:243258
TITLE: Preparation of thieno[2,3-c]pyrans and thieno[2,3-c]pyridines as modulators of protein tyrosine phosphatases (PTPases)
INVENTOR(S): Moller, Niels Peter Hundahl; Andersen, Henrik Sune; Iversen, Lars Fogh; Olsen, Ole Hvilsted; Branner, Sven; Holsworth, Daniel Dale; Bakir, Farid; Judge, Luke Milburn; Axe, Frank Urban; Jones, Todd Kevin; Ripka, William Charles; Ge, Yu; Uyeda, Roy Teruyuki
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.; Ontogen Corporation
SOURCE: PCT Int. Appl., 157 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9946267	A1	19990916	WO 1999-DK121	19990311
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2323493	AA	19990916	CA 1999-2323493	19990311
AU 9927135	A1	19990927	AU 1999-27135	19990311
BR 9908726	A	20001121	BR 1999-8726	19990311
EP 1080095	A1	20010307	EP 1999-907332	19990311
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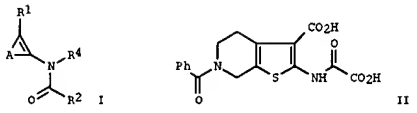
US 6262044	B1	20010717	US 1999-268490	19990311
JP 2002506072	T2	20020226	JP 2000-535645	19990311
ZA 9902036	A	19991001	ZA 1999-2036	19990312
NO 2000004527	A	20001107	NO 2000-4527	20000911
US 6410586	B1	20020625	US 2001-810266	20010316
US 2003069267	A1	20030410	US 2002-158464	20020528

PRIORITY APPLN. INFO.:

DK 1998-344	A	19980312
DK 1998-480	A	19980403
DK 1998-938	A	19980715
DK 1998-1385	A	19981028
DK 1998-1612	A	19981207
US 1998-82915P	P	19980424
US 1998-93525P	P	19980721
US 1998-108747P	P	19981117
US 1999-268490	A3	19990311
WO 1999-DK121	W	19990311
US 2001-810266	A3	20010316

OTHER SOURCE(S): MARPAT 131:243258
GI

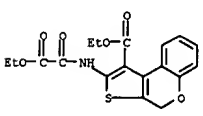
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



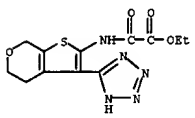
AB Thieno[2,3-c]pyrans and thieno[2,3-c]pyridines (I) [A = atoms to complete various 5/5 and 5/6 bicyclic heterocycles, e.g., thienopridines, thieno(thio)pyrans, benzothiophenes, etc.; R1 and R2 = independently acyl, OH or derivs., CF3, NO2, cyano, SO3H, (un)substituted NH2 or PO3H2, or various 5-membered heterocycles; R4 = H, OH, alkyl, (un)substituted aryl or aralkyl, (un)substituted NH2, alkoxy] were prepared as inhibitors of Protein Tyrosine Phosphatases (PTPases) such as PTP1B, CD45, SHP-1, SHP-2, PTPα, LAR, and HePTP. The compds. are useful in the treatment of type I diabetes, type II diabetes, impaired glucose tolerance, insulin resistance, obesity, immune dysfunctions including autoimmunity diseases with dysfunctions of the coagulation system, allergic diseases including asthma, osteoporosis, proliferative disorders including cancer and psoriasis, diseases with decreased or increased synthesis or effects of growth hormone, diseases with decreased or increased synthesis of hormones or cytokines that regulate the release of/or response to growth hormone, diseases of the brain including Alzheimer's disease and schizophrenia, and infectious diseases. For instance, 2-amino-6-benzoyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylic acid Et ester was amidated with Et oxalyl chloride in THF (84%), followed by hydrolysis of the ester function with NaOH in aqueous solution to give the title compound(II) as the mono-Na salt (III) in 79% yield. In an in vitro test against PTP1B expressed in E. coli and purified by known methods, III had a Ki of 51 μM.

IT **243968-05-0P 243968-12-9P 243968-16-3P 243968-17-4P 243968-19-6P 243968-22-1P 243968-28-7P 243968-33-4P 243968-35-6P 243968-42-5P 243968-45-8P 243968-48-1DP**, Wang resin-bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of thieno[2,3-c]pyrans and thieno[2,3-c]pyridines as modulators of protein tyrosine phosphatases (PTPases))

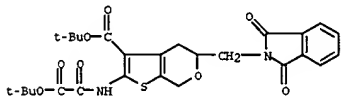
RN 243968-05-0 CAPLUS
CN 4H-Thieno[2,3-c][1]benzopyran-1-carboxylic acid, 2-[(ethoxyoxoacetyl)amino]-, ethyl ester (9CI) (CA INDEX NAME)



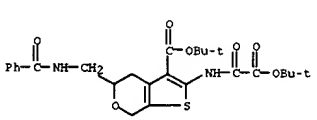
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RN 243968-12-9 CAPLUS
CN Acetic acid, [(4,7-dihydro-3-(1H-tetrazol-5-yl)-5H-thieno[2,3-c]pyran-2-yl]amino]oxo-, ethyl ester (9CI) (CA INDEX NAME)



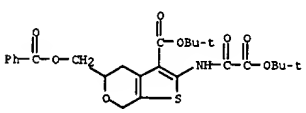
RN 243968-16-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 243968-17-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(benzoylamino)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

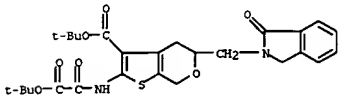


RN 243968-19-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(benzoyloxy)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

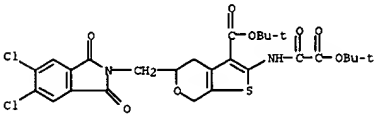


L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

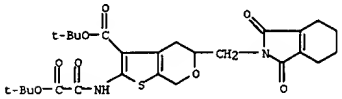
RN 243968-22-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-1-oxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 243968-28-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(5,6-dichloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

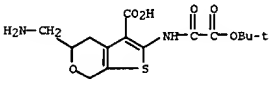


RN 243968-33-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-5-[(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

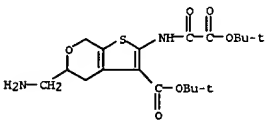


RN 243968-35-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[[[(4-methoxyphenyl)sulfonyl]amino]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

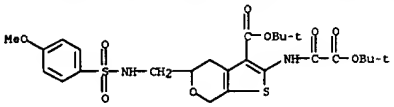


IT **243968-53-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of thieno[2,3-c]pyrans and thieno[2,3-c]pyridines as
modulators of protein tyrosine phosphatases (PTPases))
RN 243968-53-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-(aminomethyl)-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

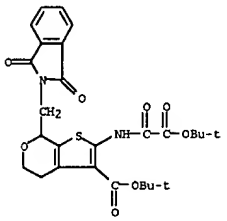


IT **243966-06-5P 243966-19-0P 243966-20-3P**
243966-22-5P 243966-27-0P 243966-28-1P
243966-29-2P 243966-30-5P 243966-33-8P
243966-34-9P 243966-35-0P 243966-36-1P
243966-37-2P 243966-38-3P 243966-39-4P
243966-40-7P 243966-42-9P 243966-43-0P
243966-44-1P 243966-45-2P 243966-46-3P
243966-50-9P 243966-51-0P 243966-52-1P
243966-53-2P 243966-54-3P 243966-55-4P
243966-56-5P 243966-57-6P 243966-58-7P
243966-59-8P 243966-60-1P 243966-61-2P
243966-62-3P 243966-63-4P 243966-64-5P
243966-65-6P 243966-66-7P 243966-67-8P
243966-68-9P 243966-69-0P 243966-70-3P
243966-71-4P 243966-72-5P 243966-73-6P
243966-74-7P 243966-75-8P 243966-76-9P
243966-77-0P 243966-78-1P 243966-79-2P
243966-80-5P 243966-81-6P 243966-82-7P
243966-83-8P 243966-84-9P 243966-85-0P
243966-86-1P 243966-87-2P 243966-89-4P
243966-90-7P 243966-92-9P 243966-93-0P
243966-95-2P 243966-96-3P 243966-97-4P
243966-98-5P 243966-99-6P 243967-00-2P
243967-01-3P 243967-02-4P 243967-03-5P
243967-05-7P 243967-07-9P 243967-09-1P
243967-11-5P 243967-13-7P 243967-15-9P
243967-17-1P 243967-18-2P 243967-19-3P
243967-20-6P 243967-21-7P 243967-22-8P
243967-23-9P 243967-24-0P 243967-25-1P

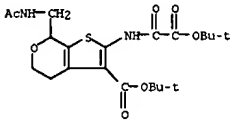
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 243968-42-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

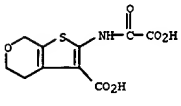


RN 243968-45-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(acetylamino)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



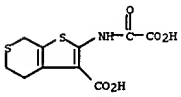
RN 243968-48-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-(aminomethyl)-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
243967-26-2P 243967-27-3P 243967-28-4P
243967-29-5P 243967-30-8P 243967-31-9P
243967-32-0P 243967-33-1P 243967-34-2P
243967-35-3P 243967-41-1P 243967-48-8P
243967-49-9P 243967-50-2P 243967-54-6P
243967-55-7P 243967-57-9P 243967-58-0P
243967-59-1P 243967-60-4P 243967-61-5P
243967-62-6P 243967-63-7P 243967-64-8P
243967-65-9P 243967-66-0P 243967-67-1P
243967-68-2P 243967-69-3P 243967-70-6P
243967-71-7P 243967-72-8P 243967-73-9P
243967-74-0P 243967-75-1P 243967-76-2P
243967-77-3P 243967-78-4P 243967-79-5P
243967-80-8P 243967-81-9P 243967-82-0P
243967-84-2P 243967-85-3P 243967-86-4P
243967-87-5P 243967-88-6P 243967-89-7P
243967-90-0P 243967-91-1P 243967-92-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compd.; prepn. of thieno[2,3-c]pyrans and thieno[2,3-c]pyridines as modulators of protein tyrosine phosphatases (PTPases))
RN 243966-06-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, monosodium salt (9CI) (CA INDEX NAME)



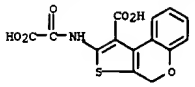
● Na

RN 243966-19-0 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



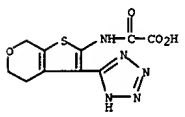
RN 243966-20-3 CAPLUS
CN 4H-Thieno[2,3-c][1]benzopyran-1-carboxylic acid, 2-[(carboxycarbonyl)amino]-, monosodium salt (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



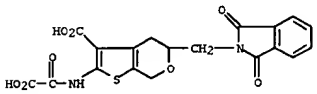
● Na

RN 243966-22-5 CAPLUS
CN Acetic acid, [[4,7-dihydro-3-(1H-tetrazol-5-yl)-5H-thieno[2,3-c]pyran-2-yl]amino]oxo-, disodium salt (9CI) (CA INDEX NAME)



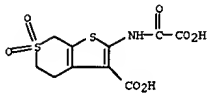
●2 Na

RN 243966-27-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



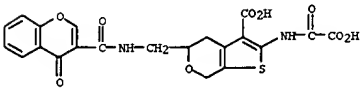
RN 243966-28-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(benzoylamino)methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

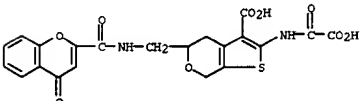


● Na

RN 243966-35-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(4-oxo-4H-1-benzopyran-3-yl)carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)

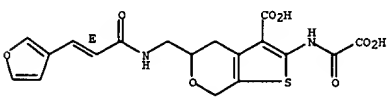


RN 243966-36-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(4-oxo-4H-1-benzopyran-2-yl)carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)



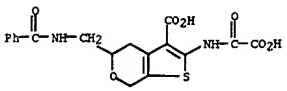
RN 243966-37-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(2E)-3-(3-furanyl)-1-oxo-2-propenyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

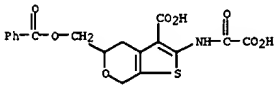


RN 243966-38-3 CAPLUS

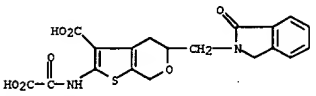
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



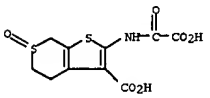
RN 243966-29-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(benzoyloxy)methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-30-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-1-oxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-33-8 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, 6-oxide (9CI) (CA INDEX NAME)

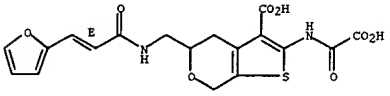


RN 243966-34-9 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, 6,6-dioxide, monosodium salt (9CI) (CA INDEX NAME)

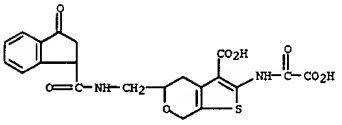
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(2E)-3-(2-furanyl)-1-oxo-2-propenyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

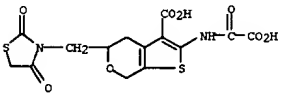
Double bond geometry as shown.



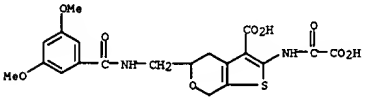
RN 243966-39-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(2,3-dihydro-3-oxo-1H-inden-1-yl)carbonyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-40-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(2,4-dioxo-3-thiazolidinyl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

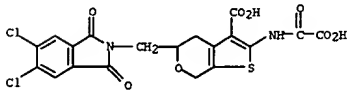


RN 243966-42-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(3,5-dimethoxybenzoyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

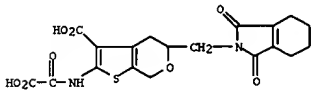


L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

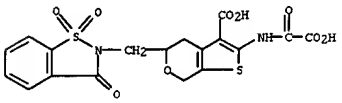
RN 243966-43-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,6-dichloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-44-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

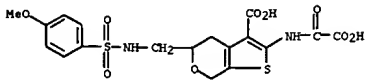


RN 243966-45-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,1-dioxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

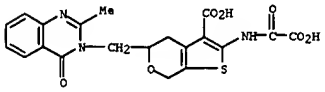


RN 243966-46-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(4-methoxyphenyl)sulfonyl]amino]methyl]- (9CI) (CA INDEX NAME)

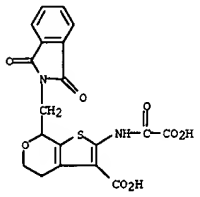
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 243966-50-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[(2-methyl-4-oxo-3(4H)-quinazolinyl)methyl]- (9CI) (CA INDEX NAME)

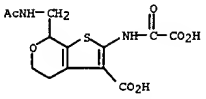


RN 243966-51-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



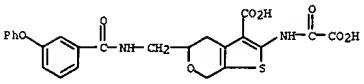
RN 243966-52-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(acetylamino)methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro-, monosodium salt (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

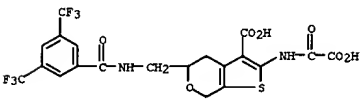


● Na

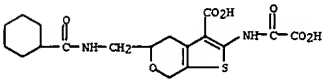
RN 243966-53-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(3-phenoxybenzoyl)amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-54-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[3,5-bis(trifluoromethyl)benzoyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

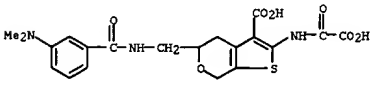


RN 243966-55-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(cyclohexylcarbonyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

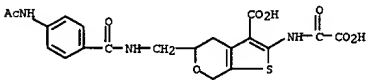


RN 243966-56-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[3-(dimethylamino)benzoyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

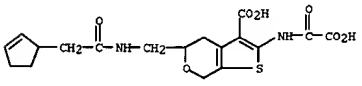
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



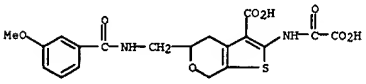
RN 243966-57-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[4-(acetylamino)benzoyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-58-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(2-cyclopenten-1-ylacetyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

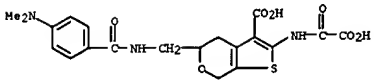


RN 243966-59-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(3-methoxybenzoyl)amino]methyl]- (9CI) (CA INDEX NAME)

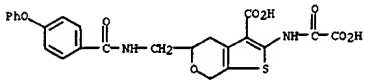


RN 243966-60-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[4-(dimethylamino)benzoyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

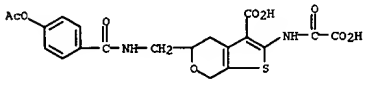
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



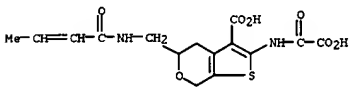
RN 243966-61-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(4-phenoxybenzoyl)amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-62-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[4-(acetyloxy)benzoyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

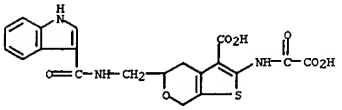


RN 243966-63-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1-oxo-2-butenyl)amino]methyl]- (9CI) (CA INDEX NAME)

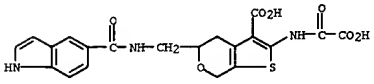


RN 243966-64-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,4-dioxo-4-phenylbutyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

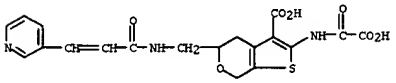
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



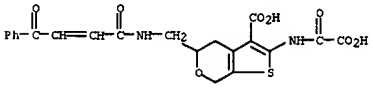
RN 243966-69-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1H-indol-5-ylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-70-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[1-oxo-3-(3-pyridinyl)-2-propenyl]amino]methyl]- (9CI) (CA INDEX NAME)

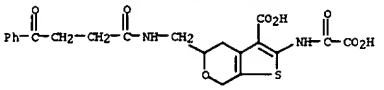


RN 243966-71-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,4-dioxo-4-phenyl-2-butenyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

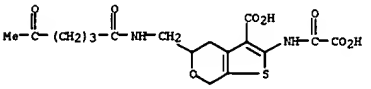


RN 243966-72-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[[4-(phenylmethoxy)phenoxy]acetyl]amino]methyl]- (9CI) (CA INDEX NAME)

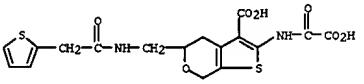
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



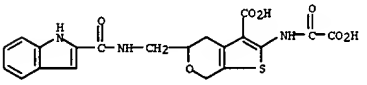
RN 243966-65-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,5-dioxohexyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-66-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(2-thienylacetyl)amino]methyl]- (9CI) (CA INDEX NAME)

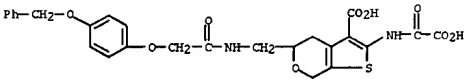


RN 243966-67-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1H-indol-2-ylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

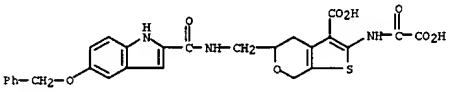


RN 243966-68-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1H-indol-3-ylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

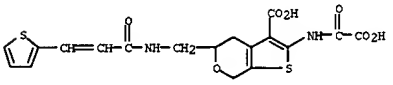
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



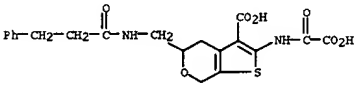
RN 243966-73-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[[5-(phenylmethoxy)-1H-indol-2-yl]carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-74-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[1-oxo-3-(2-thienyl)-2-propenyl]amino]methyl]- (9CI) (CA INDEX NAME)

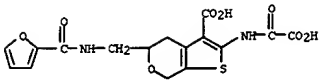


RN 243966-75-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1-oxo-3-phenylpropyl)amino]methyl]- (9CI) (CA INDEX NAME)

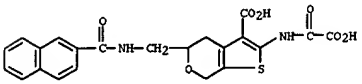


RN 243966-76-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(2-furanylcarbonyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

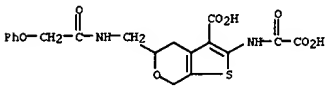
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



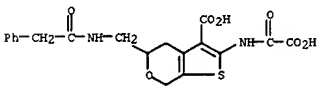
RN 243966-77-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(2-naphthalenylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-78-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(phenoxyacetyl)amino]methyl]- (9CI) (CA INDEX NAME)

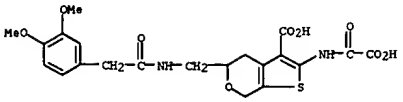


RN 243966-79-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(phenylacetyl)amino]methyl]- (9CI) (CA INDEX NAME)

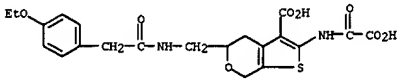


RN 243966-80-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(3,4-dimethoxyphenyl)acetyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

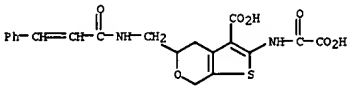
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



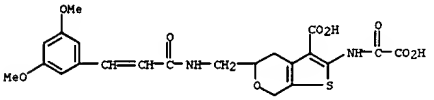
RN 243966-81-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(4-ethoxyphenyl)acetyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-82-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1-oxo-3-phenyl-2-propenyl)amino]methyl]- (9CI) (CA INDEX NAME)

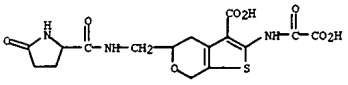


RN 243966-83-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)aminoi]-5-[[[3-(3,5-dimethoxyphenyl)-1-oxo-2-propenyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

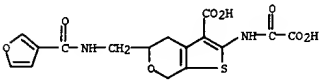


RN 243966-84-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-

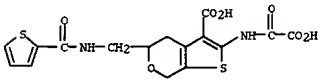
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
dihydro-5-[[[(5-oxo-2-pyrrolidinyl)carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)



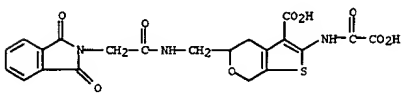
RN 243966-85-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(3-furanylcarbonyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-86-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(2-thienylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

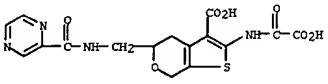


RN 243966-87-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)acetyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

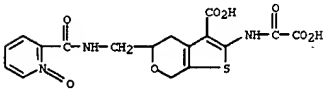


RN 243966-89-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(pyrazinylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

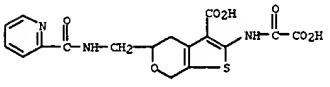
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



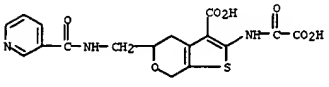
RN 243966-90-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(1-oxido-2-pyridinyl]carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-92-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(2-pyridinylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

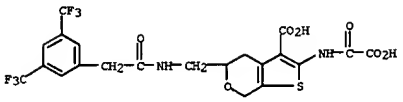


RN 243966-93-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(3-pyridinylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

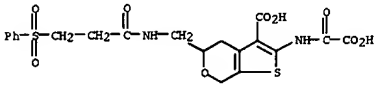


RN 243966-95-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[[3,5-bis(trifluoromethyl)phenyl]acetyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

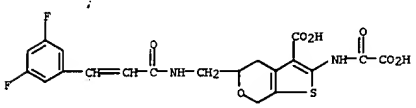
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



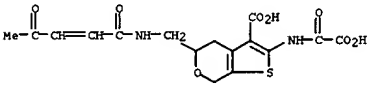
RN 243966-96-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[1-oxo-3-(phenylsulfonyl)propyl]amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-97-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[3-(3,5-difluorophenyl)-1-oxo-2-propenyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

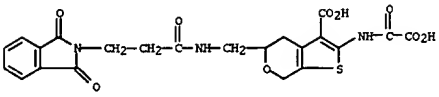


RN 243966-98-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,4-dioxo-2-pentenyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

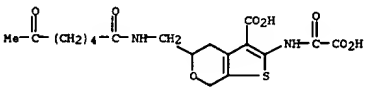


RN 243966-99-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-1-oxopropyl]amino]methyl]-4,7-

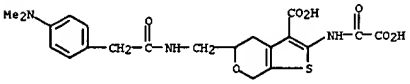
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



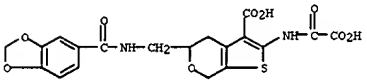
RN 243967-00-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,6-dioxoheptyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-01-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[[4-(dimethylamino)phenyl]acetyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

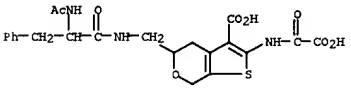


RN 243967-02-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[(1,3-benzodioxol-5-ylcarbonyl)amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

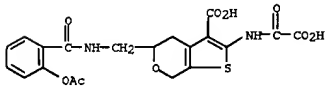


RN 243967-03-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)-1-oxo-3-

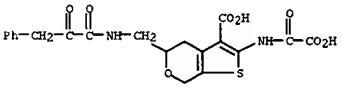
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
phenylpropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



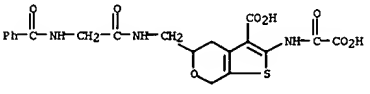
RN 243967-05-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetyloxy)benzoyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-07-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,2-dioxo-3-phenylpropyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

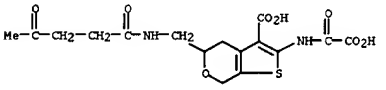


RN 243967-09-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[(benzoylamino)acetyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

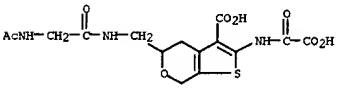


RN 243967-11-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,4-dioxopentyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

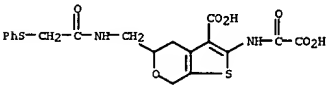
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



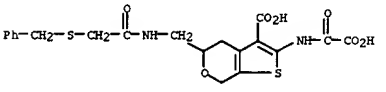
RN 243967-13-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[(acetylamino)acetyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-15-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(phenylthio)acetyl]amino]methyl]- (9CI) (CA INDEX NAME)

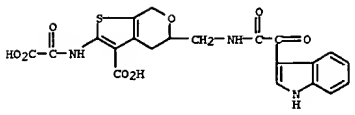


RN 243967-17-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[[(phenylmethyl)thio]acetyl]amino]methyl]- (9CI) (CA INDEX NAME)

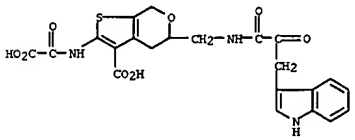


RN 243967-18-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(cazrboxycarbonyl)amino]-4,7-dihydro-5-[[(1H-indol-3-yloxoacetyl)amino]methyl]- (9CI) (CA INDEX NAME)

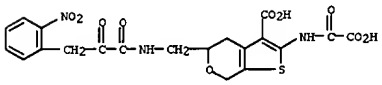
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 243967-19-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[3-(1H-indol-3-yl)-1,2-dioxopropyl]amino]methyl]- (9CI) (CA INDEX NAME)

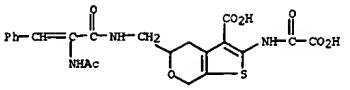


RN 243967-20-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[3-(2-nitrophenyl)-1,2-dioxopropyl]amino]methyl]- (9CI) (CA INDEX NAME)

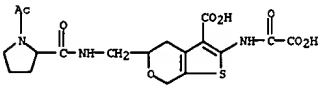


RN 243967-21-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)-1-oxo-3-phenyl-2-propenyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

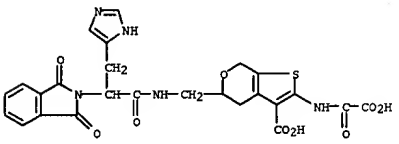
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



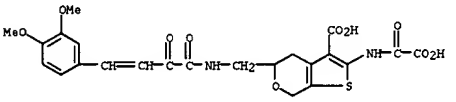
RN 243967-22-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[(1-acetyl-2-pyrrolidinyl)carbonyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-23-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3-(1H-imidazol-4-yl)-1-oxopropyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

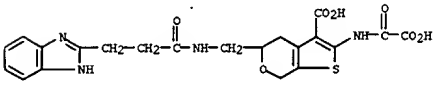


RN 243967-24-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[4-(3,4-dimethoxyphenyl)-1,2-dioxo-3-butenyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

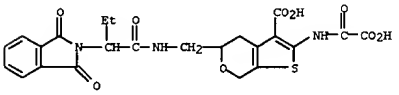


L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

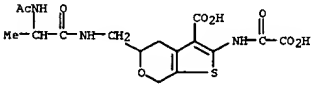
RN 243967-25-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[3-(1H-benzimidazol-2-yl)-1-oxopropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



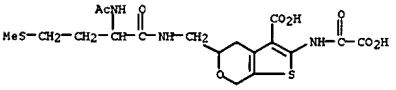
RN 243967-26-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-1-oxobutyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-27-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)-1-oxopropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

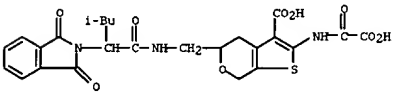


RN 243967-28-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)-4-(methylthio)-1-oxobutyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

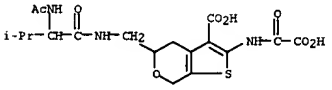


RN 243967-29-5 CAPLUS

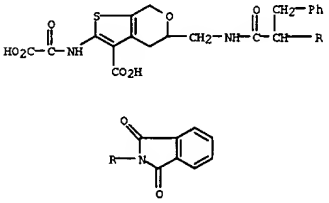
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-4-methyl-1-oxopentyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-30-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)-3-methyl-1-oxobutyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

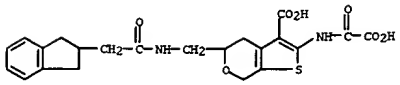


RN 243967-31-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-1-oxo-3-phenylpropyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

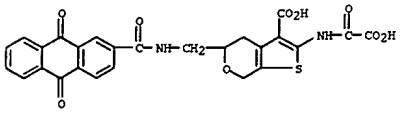


RN 243967-32-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(2,3-dihydro-1H-inden-2-yl)acetyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

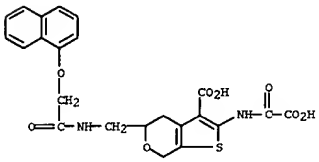
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 243967-33-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(9,10-dihydro-9,10-dioxo-2-anthracenyl)carbonyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

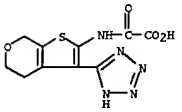


RN 243967-34-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(1-naphthalenyloxy)acetyl]amino]methyl]- (9CI) (CA INDEX NAME)

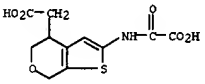


RN 243967-35-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-1-oxopropyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

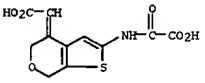
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



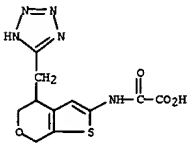
RN 243967-54-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-4-acetic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-55-7 CAPLUS
CN Acetic acid, [[4-(carboxymethylene)-4,7-dihydro-5H-thieno[2,3-c]pyran-2-yl]amino]oxo- (9CI) (CA INDEX NAME)

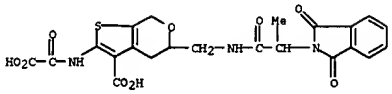


RN 243967-57-9 CAPLUS
CN Acetic acid, [[4,7-dihydro-4-(1H-tetrazol-5-ylmethyl)-5H-thieno[2,3-c]pyran-2-yl]amino]oxo- (9CI) (CA INDEX NAME)

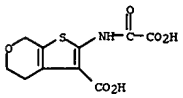


RN 243967-58-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)benzoyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

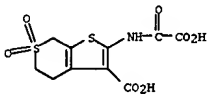
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



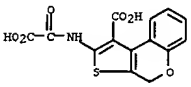
RN 243967-41-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-48-8 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, 6,6-dioxide (9CI) (CA INDEX NAME)

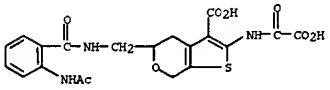


RN 243967-49-9 CAPLUS
CN 4H-Thieno[2,3-c][1]benzopyran-1-carboxylic acid, 2-[(carboxycarbonyl)amino]- (9CI) (CA INDEX NAME)

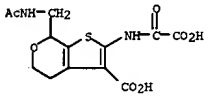


RN 243967-50-2 CAPLUS
CN Acetic acid, [[4,7-dihydro-3-(1H-tetrazol-5-yl)-5H-thieno[2,3-c]pyran-2-yl]amino]oxo- (9CI) (CA INDEX NAME)

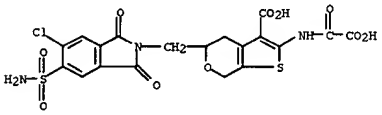
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



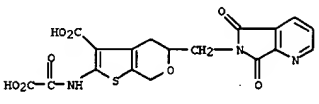
RN 243967-59-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(acetylamino)methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-60-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[5-(aminosulfonyl)-6-chloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

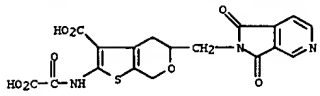


RN 243967-61-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

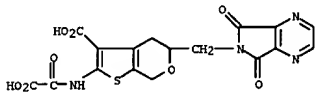


RN 243967-62-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-c]pyridin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

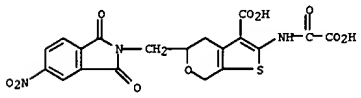
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



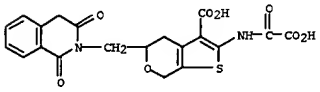
RN 243967-63-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyrazin-6-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-64-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-5-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

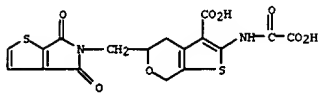


RN 243967-65-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(3,4-dihydro-1,3-dioxo-2(1H)-isoquinolinyl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

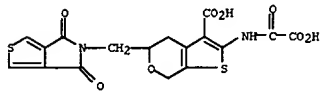


RN 243967-66-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(4,6-dihydro-4,6-dioxo-5H-thieno[2,3-c]pyrrol-5-yl)methyl]-4,7-dihydro-

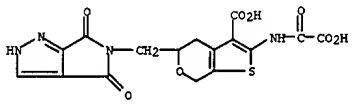
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(9CI) (CA INDEX NAME)



RN 243967-67-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(4,6-dioxo-4H-thieno[3,4-c]pyrrol-5(6H)-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

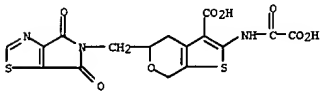


RN 243967-68-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(2,6-dihydro-4,6-dioxopyrrolo[3,4-c]pyrazol-5(4H)-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

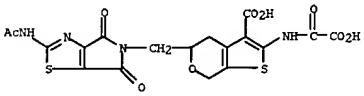


RN 243967-69-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(4,6-dihydro-4,6-dioxo-5H-pyrrolo[3,4-d]thiazol-5-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

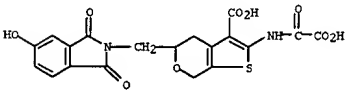
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



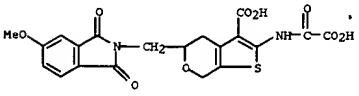
RN 243967-70-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[2-(acetylamino)-4,6-dihydro-4,6-dioxo-5H-pyrrolo[3,4-d]thiazol-5-yl]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-71-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-5-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

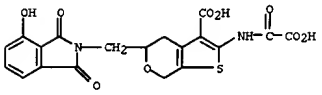


RN 243967-72-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-5-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

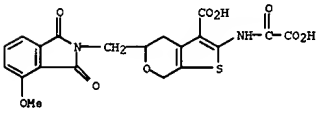


RN 243967-73-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-4-hydroxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

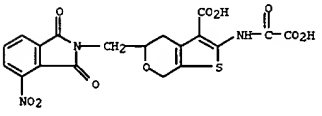
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



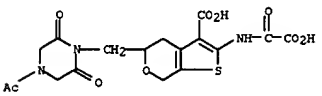
RN 243967-74-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-4-methoxy-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-75-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-4-nitro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



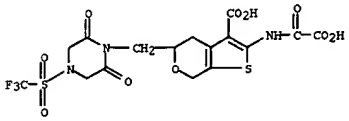
RN 243967-76-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(4-acetyl-2,6-dioxo-1-piperazinyl)methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-77-3 CAPLUS

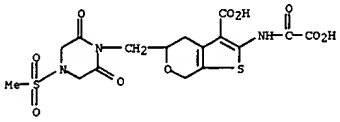
L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(2,6-dioxo-4-[(trifluoromethyl)sulfonyl]-1-piperazinyl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



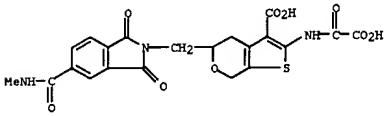
RN 243967-78-4 CAPLUS

CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[4-(methylsulfonyl)-2,6-dioxo-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RN 243967-79-5 CAPLUS

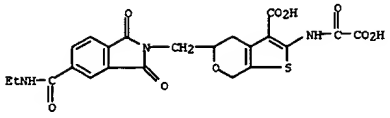
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[1,3-dihydro-5-[(methylamino)carbonyl]-1,3-dioxo-2H-isoindol-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-80-8 CAPLUS

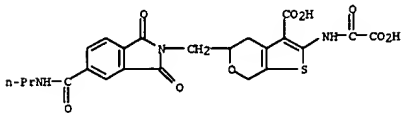
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[5-[(ethylamino)carbonyl]-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



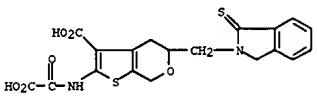
RN 243967-81-9 CAPLUS

CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[1,3-dihydro-1,3-dioxo-5-[(propylamino)carbonyl]-2H-isoindol-2-yl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-82-0 CAPLUS

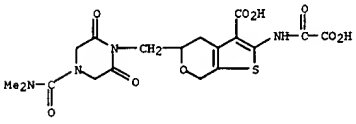
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-1-thioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-84-2 CAPLUS

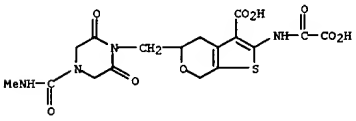
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[4-[(dimethylamino)carbonyl]-2,6-dioxo-1-piperazinyl]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



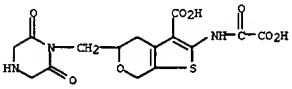
RN 243967-85-3 CAPLUS

CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[4-[(methylamino)carbonyl]-2,6-dioxo-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



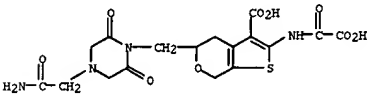
RN 243967-86-4 CAPLUS

CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(2,6-dioxo-1-piperazinyl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-87-5 CAPLUS

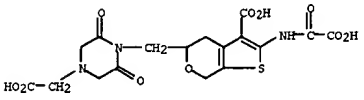
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[4-(2-amino-2-oxoethyl)-2,6-dioxo-1-piperazinyl]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-88-6 CAPLUS

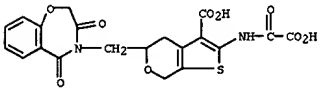
CN 1-Piperazineacetic acid, 4-[[3-carboxy-2-[(carboxycarbonyl)amino]-4,7-dihydro-5H-thieno[2,3-c]pyran-5-yl]methyl]-3,5-dioxo- (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



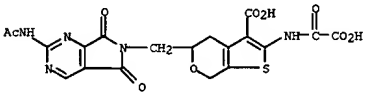
RN 243967-89-7 CAPLUS

CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(2,3-dihydro-3,5-dioxo-1,4-benzoxazepin-4(5H)-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



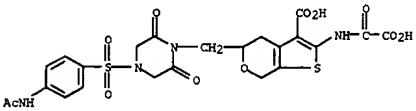
RN 243967-90-0 CAPLUS

CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[2-(acetylamino)-5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-d]pyrimidin-6-yl]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-91-1 CAPLUS

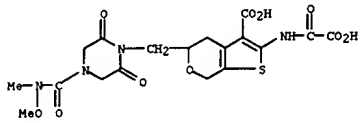
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[4-[[4-(acetylamino)phenyl]sulfonyl]-2,6-dioxo-1-piperazinyl]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-92-2 CAPLUS

CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[4-[(methoxymethylamino)carbonyl]-2,6-dioxo-1-

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
piperazinyl]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:595127 CAPLUS
DOCUMENT NUMBER: 131:228643
TITLE: Preparation of oxalylaminothiophene derivatives as modulators of protein tyrosine phosphatases (PTPases)
INVENTOR(S): Richter, Lutz Stefan; Andersen, Henrik Sune; Vagner, Josef; Jeppesen, Claus Bekker; Moller, Niels Peter Hundahl; Branner, Sven; Jeppesen, Lone; Olsen, Ole Hvilsted; Iversen, Lars Fogh; Holsworth, Daniel Dale; Axe, Frank Urban; Ge, Yu; Jones, Todd Kevin; Ripka, William Charles; Uyeda, Roy Teruyuki; Su, Jing; Bakir, Farid; Judge, Luke Milburn
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.; Ontogen Corporation; Richter, Birgith
SOURCE: PCT Int. Appl., 230 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9946237	A1	19990916	WO 1999-DK126	19990312
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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US 2002019412	A1	20020214	US 1999-265316	19990309
AU 9927139	A1	19990927	AU 1999-27139	19990311
US 6262044	B1	20010717	US 1999-268490	19990311
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ZA 9902032	A	19990927	ZA 1999-2032	19990312
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ZA 9902036	A	19991001	ZA 1999-2036	19990312
BR 9908723	A	20001121	BR 1999-8723	19990312
EP 1080068	A1	20010307	EP 1999-907336	19990312
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JP 2004500308	T2	20040108	JP 2000-535620	19990312
NO 2000004526	A	20001108	NO 2000-4526	20000911
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US 2003069267	A1	20030410	US 2002-158464	20020528

PRIORITY APPLN. INFO.:

DK 1998-350	A	19980312
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L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

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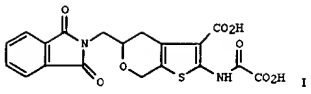


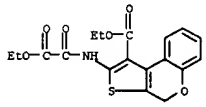
I

AB Oxalylaminoheterocycles (e.g., oxalylaminothiophene and oxalylaminothienopyran derivs., etc.) were prepared as inhibitors of Protein Tyrosine Phosphatases (PTPases), such as PTP1B, TC-PTP, CD45, SHP-1, SHP-2, PTPα, PTPε, PTPμ, PTPδ, PTPσ, PTPζ, PTPβ, PTPD1, PTPD2, PTPH1, PTP-MEG1, PTP-LAR, and HePTP. These compds. are indicated in the management or treatment of a broad range of diseases such as autoimmune diseases, acute and chronic inflammation, osteoporosis, various forms of cancer and malignant diseases, and type I diabetes and type II diabetes. For instance, 2-amino-5-hydroxymethyl-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid tert-Bu ester (preparation given) was reacted with phthalimide in THF, PPh3, and DIAD to form the 5-phthalimidomethyl derivative (47%). The amine was amidated with imidazol-1-yloxoacetic acid tert-Bu ester in CH2Cl2 and TEA (99%), followed by hydrolysis of the ester function with TFA in CH2Cl2, to give 5-(1,3-dioxo-1,3-dihydroisoindol-2-ylmethyl)-2-(oxalylamino)-4,7-dihydro-5H-thieno[2,3-c]pyran-3-carboxylic acid (I) in 57% yield. In an in vitro test against PTP1B expressed in E. coli and purified by known methods, Ki values at various inhibitor concns. were detd. An anal. of selectivity of two PTPase inhibitors against PTP1B, PTP-LAR, PTPε, CD45, and PTPβ showed that one compd. of the invention is a non-selective inhibitor, whereas another behaves like a selective inhibitor.

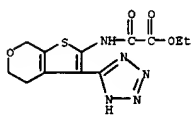
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

IT **243968-05-0P 243968-12-9P 243968-16-3P**
243968-17-4P 243968-19-6P 243968-22-1P
243968-28-7P 243968-33-4P 243968-35-6P
243968-42-5P 243968-45-8P 243968-48-1DP, Wang resin-bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of oxalylaminothiophene derivs. as modulators of protein tyrosine phosphatases (PTPases))

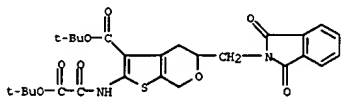
RN 243968-05-0 CAPLUS
CN 4H-Thieno[2,3-c][1]benzopyran-1-carboxylic acid, 2-[(ethoxyoxoacetyl)amino]-, ethyl ester (9CI) (CA INDEX NAME)



RN 243968-12-9 CAPLUS
CN Acetic acid, [[4,7-dihydro-3-(1H-tetrazol-5-yl)-5H-thieno[2,3-c]pyran-2-yl]amino]oxo-, ethyl ester (9CI) (CA INDEX NAME)

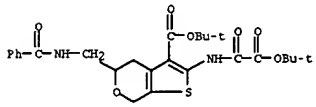


RN 243968-16-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

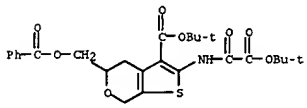


L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

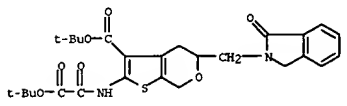
RN 243968-17-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(benzoylamino)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 243968-19-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(benzoyloxy)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

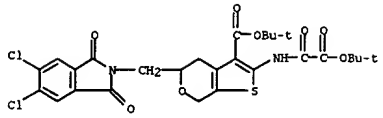


RN 243968-22-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(1,3-dihydro-1-oxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

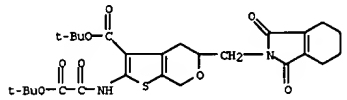


RN 243968-28-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(5,6-dichloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

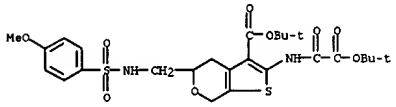
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 243968-33-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-5-[(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

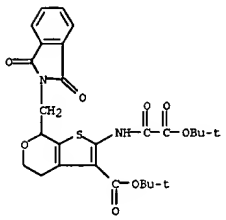


RN 243968-35-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-5-[[[(4-methoxyphenyl)sulfonyl]amino]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

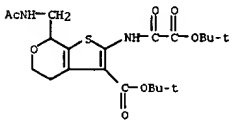


RN 243968-42-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

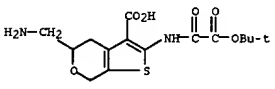
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 243968-45-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(acetylamino)methyl]-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

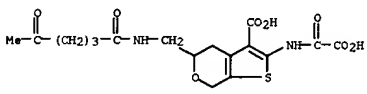


RN 243968-48-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-(aminomethyl)-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

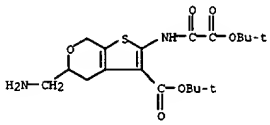


IT **243966-65-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of oxalylaminothiophene derivs. as modulators of protein tyrosine phosphatases (PTPases))
RN 243966-65-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,5-dioxohexyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT **243968-53-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of oxalylaminothiophene derivs. as modulators of protein tyrosine phosphatases (PTPases))
RN 243968-53-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-(aminomethyl)-2-[[(1,1-dimethylethoxy)oxoacetyl]amino]-4,7-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



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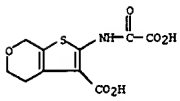
243966-50-9P 243966-51-0P 243966-53-2P
243966-54-3P 243966-55-4P 243966-56-5P
243966-57-6P 243966-58-7P 243966-59-8P
243966-60-1P 243966-61-2P 243966-62-3P
243966-63-4P 243966-64-5P 243966-66-7P
243966-67-8P 243966-68-9P 243966-69-0P
243966-70-3P 243966-71-4P 243966-72-5P
243966-73-6P 243966-74-7P 243966-75-8P
243966-76-9P 243966-77-0P 243966-78-1P
243966-79-2P 243966-80-5P 243966-81-6P
243966-82-7P 243966-83-8P 243966-84-9P
243966-85-0P 243966-86-1P 243966-87-2P
243966-89-4P 243966-90-7P 243966-92-9P
243966-93-0P 243966-95-2P 243966-96-3P
243966-97-4P 243966-98-5P 243966-99-6P
243967-00-2P 243967-01-3P 243967-02-4P
243967-03-5P 243967-05-7P 243967-07-9P
243967-09-1P 243967-11-5P 243967-13-7P
243967-15-9P 243967-17-1P 243967-18-2P
243967-19-3P 243967-20-6P 243967-21-7P
243967-22-8P 243967-23-9P 243967-24-0P
243967-25-1P 243967-26-2P 243967-27-3P
243967-28-4P 243967-29-5P 243967-30-8P

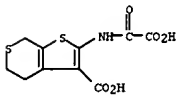
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
243967-31-9P 243967-32-0P 243967-33-1P
243967-34-2P 243967-35-3P 243967-59-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compd.; prepn. of oxalylaminothiophene derivs. as modulators of protein tyrosine phosphatases (PTPases))

RN 243966-06-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, monosodium salt (9CI) (CA INDEX NAME)

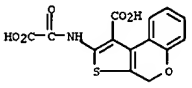


● Na

RN 243966-19-0 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



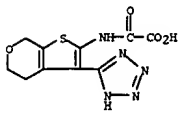
RN 243966-20-3 CAPLUS
CN 4H-Thieno[2,3-c][1]benzopyran-1-carboxylic acid, 2-[(carboxycarbonyl)amino]-, monosodium salt (9CI) (CA INDEX NAME)



● Na

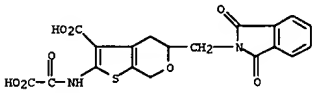
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 243966-22-5 CAPLUS
CN Acetic acid, [[4,7-dihydro-3-(1H-tetrazol-5-yl)-5H-thieno[2,3-c]pyran-2-yl]amino]oxo-, disodium salt (9CI) (CA INDEX NAME)

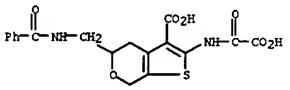


●2 Na

RN 243966-27-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

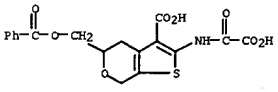


RN 243966-28-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(benzoylamino)methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

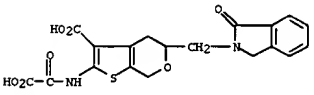


RN 243966-29-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[(benzoyloxy)methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

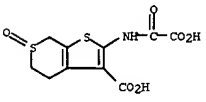
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



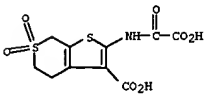
RN 243966-30-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3-dihydro-1-oxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-33-8 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, 6-oxide (9CI) (CA INDEX NAME)



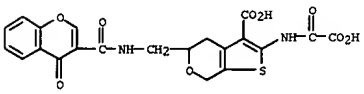
RN 243966-34-9 CAPLUS
CN 5H-Thieno[2,3-c]thiopyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-, 6,6-dioxide, monosodium salt (9CI) (CA INDEX NAME)



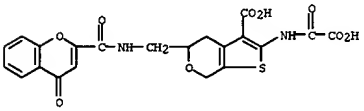
● Na

RN 243966-35-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(4-oxo-4H-1-benzopyran-3-yl)carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

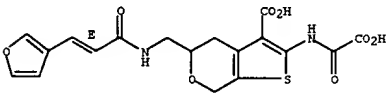


RN 243966-36-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(4-oxo-4H-1-benzopyran-2-yl)carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)



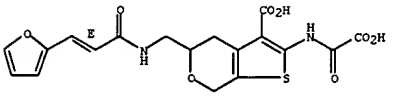
RN 243966-37-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(2E)-3-(3-furanyl)-1-oxo-2-propenyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



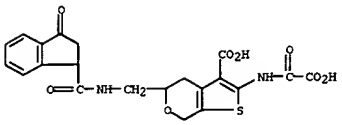
RN 243966-38-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(2E)-3-(2-furanyl)-1-oxo-2-propenyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

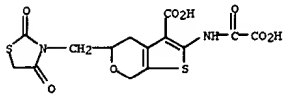


RN 243966-39-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(2,3-dihydro-3-oxo-1H-inden-1-yl)carbonyl]amino]methyl]-4,7-dihydro-

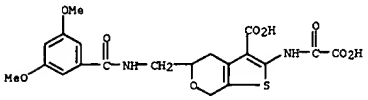
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(9CI) (CA INDEX NAME)



RN 243966-40-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(2,4-dioxo-3-thiazolidinyl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

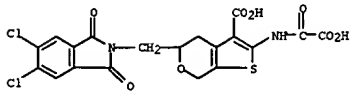


RN 243966-42-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(3,5-dimethoxybenzoyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

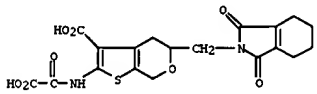


RN 243966-43-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(5,6-dichloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

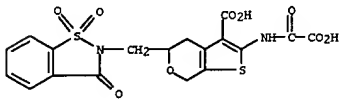
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



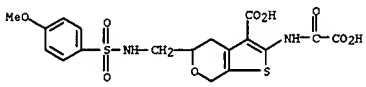
RN 243966-44-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-45-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[(1,1-dioxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

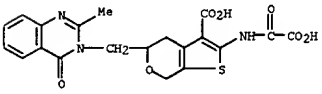


RN 243966-46-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(4-methoxyphenyl)sulfonyl]amino]methyl]- (9CI) (CA INDEX NAME)

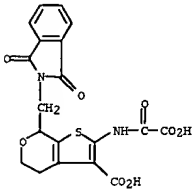


RN 243966-50-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-

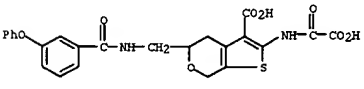
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
dihydro-5-[(2-methyl-4-oxo-3(4H)-quinazolinyl)methyl]- (9CI) (CA INDEX NAME)



RN 243966-51-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-7-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

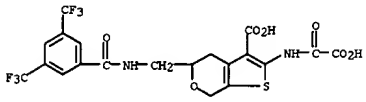


RN 243966-53-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(3-phenoxybenzoyl)amino]methyl]- (9CI) (CA INDEX NAME)

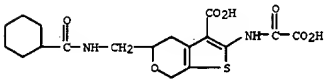


RN 243966-54-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[3,5-bis(trifluoromethyl)benzoyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

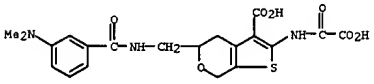
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



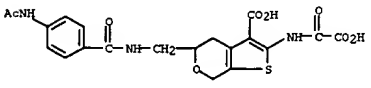
RN 243966-55-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(cyclohexylcarbonyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-56-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[3-(dimethylamino)benzoyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

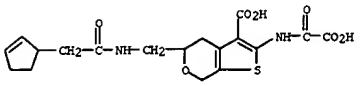


RN 243966-57-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[4-(acetylamino)benzoyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

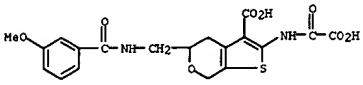


RN 243966-58-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(2-cyclopenten-1-ylacetyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

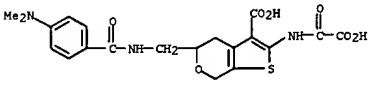
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



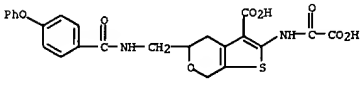
RN 243966-59-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(3-methoxybenzoyl)amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-60-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[4-(dimethylamino)benzoyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

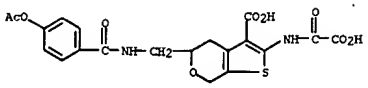


RN 243966-61-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(4-phenoxybenzoyl)amino]methyl]- (9CI) (CA INDEX NAME)

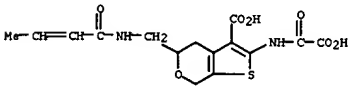


RN 243966-62-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[4-(acetyloxy)benzoyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

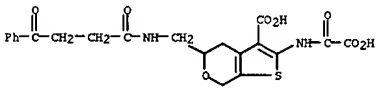
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



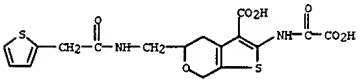
RN 243966-63-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1-oxo-2-butenyl)amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-64-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,4-dioxo-4-phenylbutyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

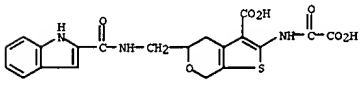


RN 243966-66-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(2-thienylacetyl)amino]methyl]- (9CI) (CA INDEX NAME)

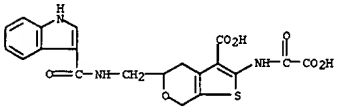


RN 243966-67-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1H-indol-2-ylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

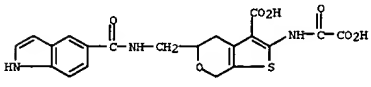
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



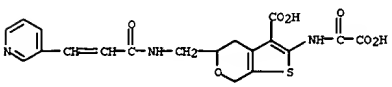
RN 243966-68-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1H-indol-3-ylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-69-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1H-indol-5-ylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

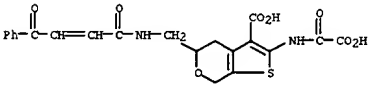


RN 243966-70-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1-oxo-3-(3-pyridinyl)-2-propenyl]amino]methyl]- (9CI) (CA INDEX NAME)

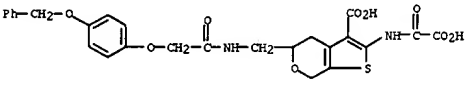


RN 243966-71-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,4-dioxo-4-phenyl-2-butenyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

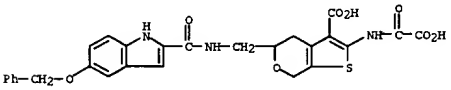
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



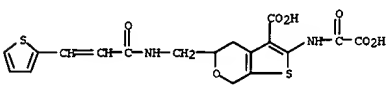
RN 243966-72-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[[4-(phenylmethoxy)phenoxy]acetyl]amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-73-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[[5-(phenylmethoxy)-1H-indol-2-yl]carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)

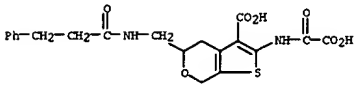


RN 243966-74-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[1-oxo-3-(2-thienyl)-2-propenyl]amino]methyl]- (9CI) (CA INDEX NAME)

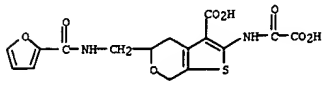


RN 243966-75-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1-oxo-3-phenylpropyl)amino]methyl]- (9CI) (CA INDEX NAME)

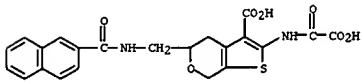
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



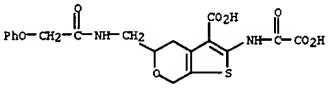
RN 243966-76-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(2-furanylcarbonyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-77-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(2-naphthalenylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

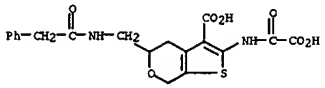


RN 243966-78-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(phenoxyacetyl)amino]methyl]- (9CI) (CA INDEX NAME)

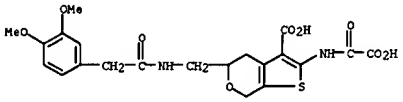


RN 243966-79-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(phenylacetyl)amino]methyl]- (9CI) (CA INDEX NAME)

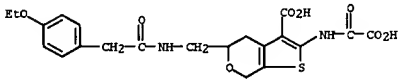
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



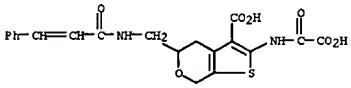
RN 243966-80-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(3,4-dimethoxyphenyl)acetyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-81-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(4-ethoxyphenyl)acetyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

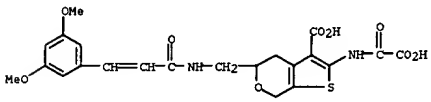


RN 243966-82-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(1-oxo-3-phenyl-2-propenyl)amino]methyl]- (9CI) (CA INDEX NAME)

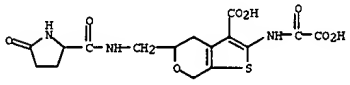


RN 243966-83-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)aminoi]-5-[[(3-(3,5-dimethoxyphenyl)-1-oxo-2-propenyl]amino]methyl]-4,7-dihydro-

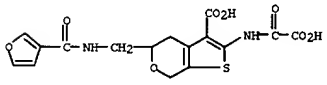
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(9CI) (CA INDEX NAME)



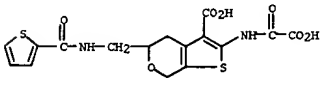
RN 243966-84-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(5-oxo-2-pyrrolidinyl)carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-85-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(3-furanylcarbonyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

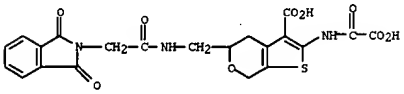


RN 243966-86-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(2-thienylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

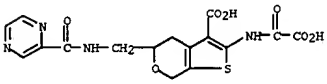


RN 243966-87-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)acetyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

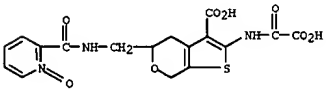
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



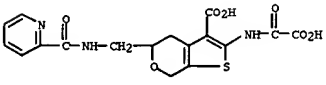
RN 243966-89-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(pyrazinylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-90-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(1-oxido-2-pyridinyl)carbonyl]amino]methyl]- (9CI) (CA INDEX NAME)

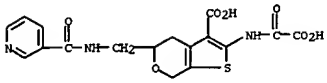


RN 243966-92-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(2-pyridinylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

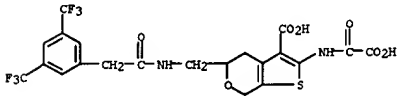


RN 243966-93-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[(3-pyridinylcarbonyl)amino]methyl]- (9CI) (CA INDEX NAME)

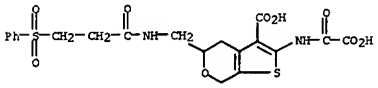
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



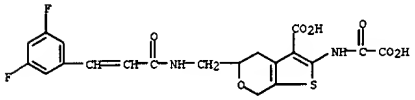
RN 243966-95-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[[3,5-bis(trifluoromethyl)phenyl]acetyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-96-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[1-oxo-3-(phenylsulfonyl)propyl]amino]methyl]- (9CI) (CA INDEX NAME)



RN 243966-97-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[3-(3,5-difluorophenyl)-1-oxo-2-propenyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243966-98-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-

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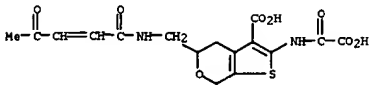
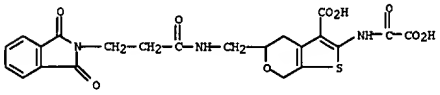
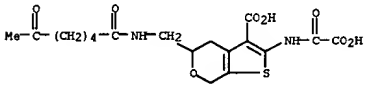
[[(1,4-dioxo-2-pentenyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



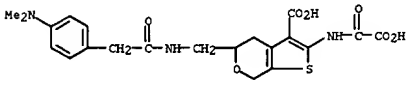
RN 243966-99-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-1-oxopropyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-00-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,6-dioxoheptyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



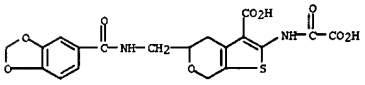
RN 243967-01-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[[4-(dimethylamino)phenyl]acetyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



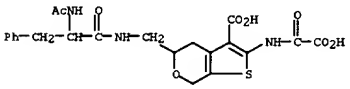
RN 243967-02-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[(1,3-benzodioxol-5-

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

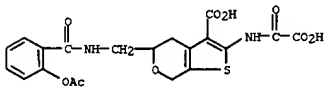
ylcarbonyl)amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



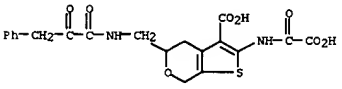
RN 243967-03-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)-1-oxo-3-phenylpropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-05-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetyloxy)benzoyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

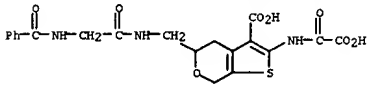


RN 243967-07-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,2-dioxo-3-phenylpropyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

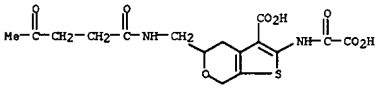


RN 243967-09-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[(benzoylamino)acetyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

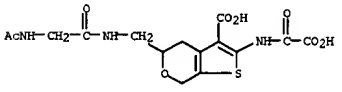
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



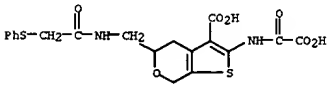
RN 243967-11-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[(1,4-dioxopentyl)amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-13-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[(acetylamino)acetyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

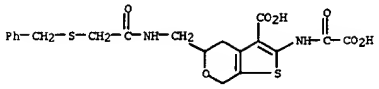


RN 243967-15-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(phenylthio)acetyl]amino]methyl]- (9CI) (CA INDEX NAME)

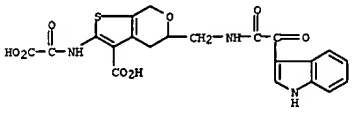


RN 243967-17-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[[(phenylmethyl)thio]acetyl]amino]methyl]- (9CI) (CA INDEX NAME)

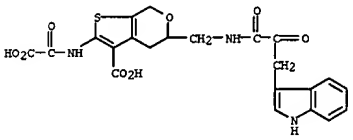
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



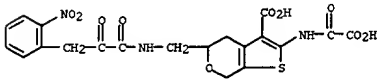
RN 243967-18-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(cazrboxycarbonyl)amino]-4,7-dihydro-5-[[(1H-indol-3-yloxoacetyl)amino]methyl]- (9CI) (CA INDEX NAME)



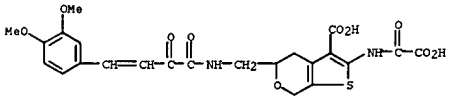
RN 243967-19-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[3-(1H-indol-3-yl)-1,2-dioxopropyl]amino]methyl]- (9CI) (CA INDEX NAME)



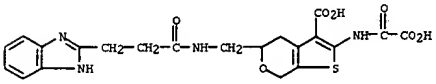
RN 243967-20-6 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[3-(2-nitrophenyl)-1,2-dioxopropyl]amino]methyl]- (9CI) (CA INDEX NAME)



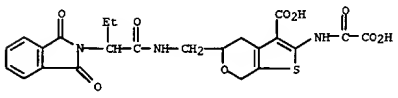
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



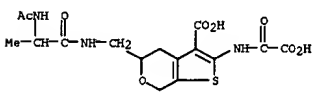
RN 243967-25-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[3-(1H-benzimidazol-2-yl)-1-oxopropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-26-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-1-oxobutyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



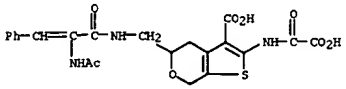
RN 243967-27-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)-1-oxopropyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



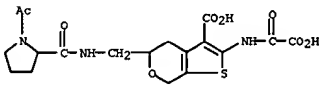
RN 243967-28-4 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)-4-(methylthio)-1-oxobutyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

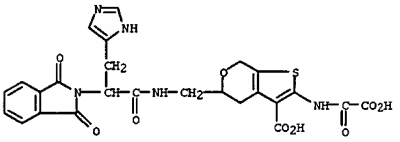
RN 243967-21-7 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)-1-oxo-3-phenyl-2-propenyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-22-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[(1-acetyl-2-pyrrolidinyl)carbonyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)

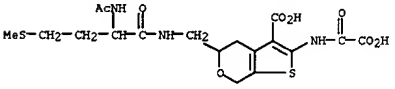


RN 243967-23-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3-(1H-imidazol-4-yl)-1-oxopropyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

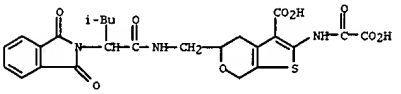


RN 243967-24-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[4-(3,4-dimethoxyphenyl)-1,2-dioxo-3-butenyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

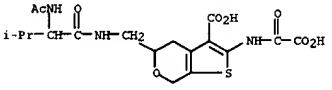
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



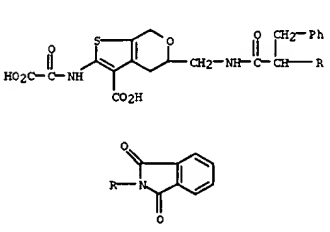
RN 243967-29-5 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-4-methyl-1-oxopentyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



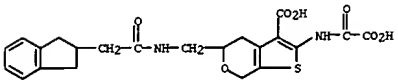
RN 243967-30-8 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 5-[[[2-(acetylamino)-3-methyl-1-oxobutyl]amino]methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



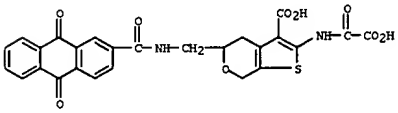
RN 243967-31-9 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-1-oxo-3-phenylpropyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



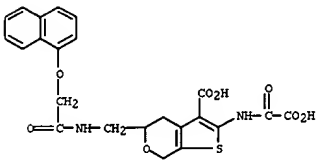
L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RN 243967-32-0 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(2,3-dihydro-1H-inden-2-yl)acetyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)



RN 243967-33-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[(9,10-dihydro-9,10-dioxo-2-anthracenyl)carbonyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

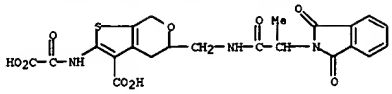


RN 243967-34-2 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-4,7-dihydro-5-[[[(1-naphthalenyloxy)acetyl]amino]methyl]- (9CI) (CA INDEX NAME)

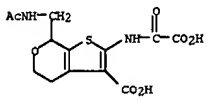


RN 243967-35-3 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 2-[(carboxycarbonyl)amino]-5-[[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-1-oxopropyl]amino]methyl]-4,7-dihydro- (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 243967-59-1 CAPLUS
CN 5H-Thieno[2,3-c]pyran-3-carboxylic acid, 7-[(acetylamino)methyl]-2-[(carboxycarbonyl)amino]-4,7-dihydro- (9CI) (CA INDEX NAME)



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